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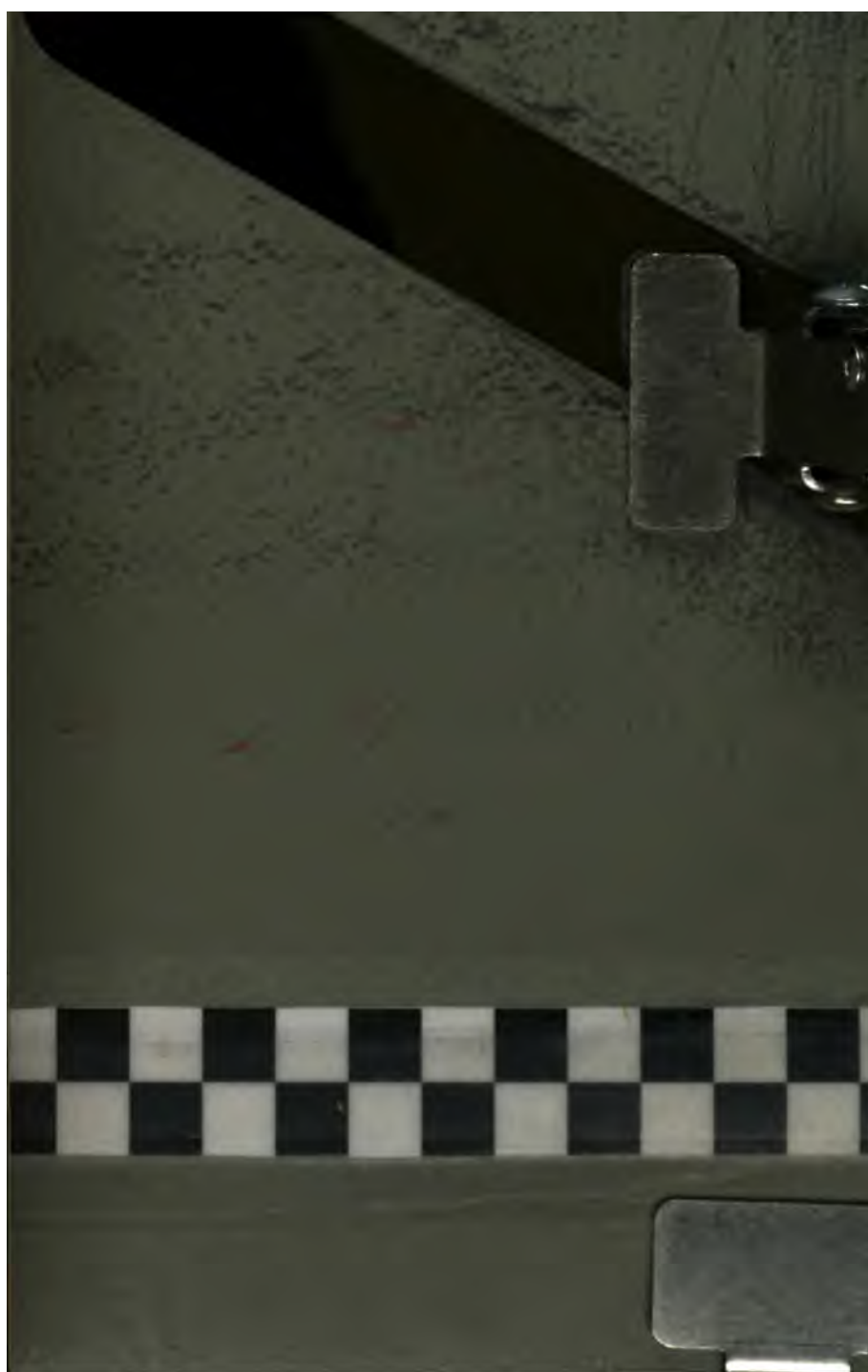
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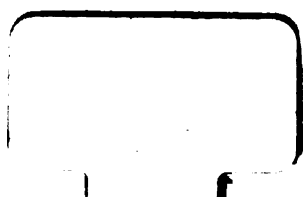
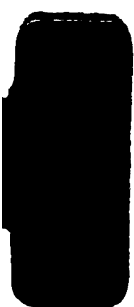
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WAR DEPARTMENT . . OFFICE OF THE CHIEF OF
SECOND (MILITARY INFORMATION) DIVISION,
GENERAL STAFF.

ser. 2. No. 9.

ACTUAL EXPERIENCES IN W.

*Battle Action of the Infantry;
Impressions of a Company Commander*

By

Capt. L. Z. SOLOVIEV,

Thirty-fourth East Siberian Rifle Regiment.

—
July, 1906.
—

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
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Document No. 279.

Office of the Chief of Staff.

GENERAL STAFF PREFACE.

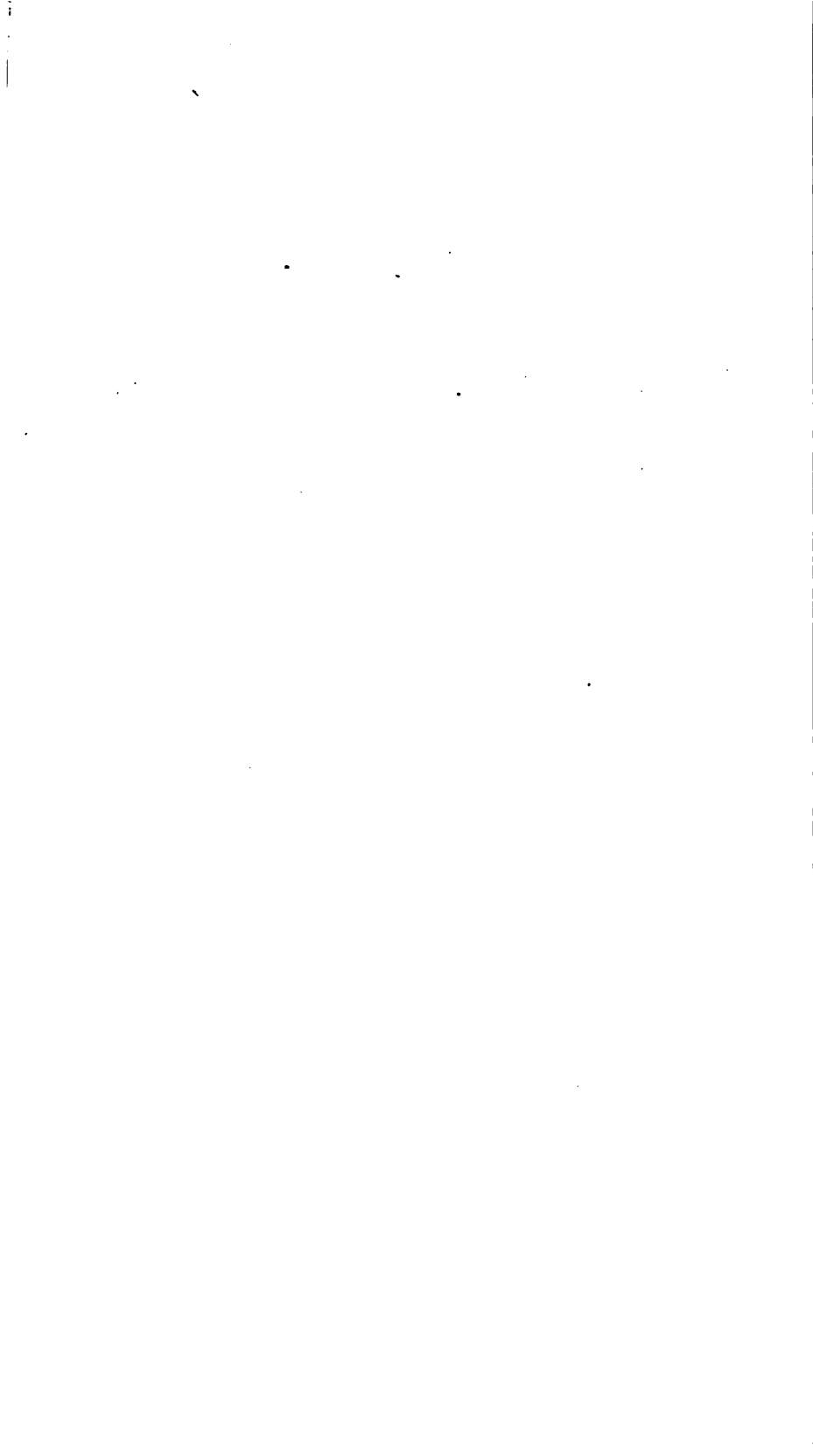
The following account of a Russian officer's experience during the recent war in Manchuria has been translated for the Army War College from a pamphlet published at St. Petersburg by the Society of Military Science.

The author, Capt. L. Z. Soloviev, Thirty-fourth East Siberian Rifles, has shown such keen and appreciative observation in his description of great battles as seen from a company commander's point of view, and his remarks cover so many mooted questions in regard to the battle tactics of to-day that the little work has been deemed worthy of publication in English for distribution to the Army.

A company in an East Siberian rifle regiment and in general in an infantry regiment of the line, on a war footing, has a normal quota of 220 rifles. The company is habitually formed in two ranks; is divided into the first and second half-companies, which are subdivided, respectively, into the first and second and the third and fourth sections. A section is further subdivided into four squads, numbered from 1 to 4 in each section. When a section consists of less than 16 files it would be divided into two squads only. It was impossible to keep the ranks full in practice, and in the advance of September-October, 1904, south of Mukden, there were companies mustering only 60 to 80 bayonets.

The Russian pace when used as a standard of measure is equivalent to one arshin=28 inches, 3 paces=1 sazhen=7 feet, and 1,500 paces=500 sazhens=1 verst=1.06 kilometers=1,161.6 yards.

WAR DEPARTMENT,
Washington, July, 1906.



ACTUAL EXPERIENCES IN WAR:

Battle Action of Infantry; Impressions of a Company Commander.

Before starting to write the present report, I must state that I can not give a full description or picture of any one battle or give an analysis of operations of large units in the theater of war, but can only share with my readers the impressions and observations which I gleaned personally, or heard from immediate participants in combat.

Unfortunately I remained but a short time at the theater of military operations. My horizon, as commander of a company, could not be wide, and therefore I crave beforehand indulgence for the incompleteness and unconsecutiveness of my remarks. My observations deal mainly with the combat as a phase of military operations which, on account of its essential importance and absorbing interest, attracts the greatest attention.

THE COMBAT.

Justice requires me to state that the first engagement in which I took part showed me most emphatically that many a thing I had to do in battle was not what I had been taught, and that many a thing I was taught is not applicable in combat. I was also struck with the incongruity of many of the demands of our regulations as regards the exactions of combat.

I shall first touch upon the technical side of combat, such as presented itself to me during the present conditions of battle. My observations deal mostly with the infantry and partly with the artillery.

MOVEMENTS IN THE ZONE OF ARTILLERY FIRE.

In present-day battles the artillery strikes at a distance of 5 or 6 versts (5,833 to 7,000 yards). Artillery combat is generally taking place at such distances, and infantry units are hit only accidentally, but should large units be discovered at that range it is certain that Japanese artillery will not lose the opportunity and that the column will come under artillery fire, and very well-aimed fire at that. Even at such ranges the movements of the infantry must consequently be made as secretly as possible, as the Japanese have an excellent service of observation over the enemy. I saw personally how one of our transports, pushing peaceably through the mountains at least some 5 versts from the positions, was taken by a Japanese battery, the first shell of which burst quite close to the train and caused an alarm, as with the first shot the train troops began to run hither and thither and lose their heads. It is marvelous how the battery could have found out that train, which was noticed by us only when the Japanese battery began firing against it.

The movements of infantry at a distance of 5 to 3 versts (5,833 to 3,500 yards) are generally effected in marching columns by sections or by lines.

But already at 3 versts' (3,500 yards) range the fire of artillery grows effective and the shells tell often, especially on open terrain. Thus arises the question: What order shall be adopted for those movements?

These movements are effected in Manchuria by marching in platoon columns so as to avoid great extension. It is impossible to march with a wide front, for there is no room and it is impossible to use company formations. The troops move, endeavoring to cover themselves by the hills, keeping to the inner side of these as in rear of breastworks, but well-aimed shrapnel may still cause great havoc to the lines. The best provision for security on the march is—secrecy.

But as soon as the troops emerge upon open terrain, movements not only in column formations but even in deployed order, are absolutely impossible, taking into consideration the striking accuracy of modern artillery.

Troops arriving from Russia often paid a high price for their ignorance of the formation taken by Siberian troops for infantry movements under artillery fire on open terrain.

This formation is arranged so that the men run singly at 10 paces interval (see sketch No. 1).

It sometimes happens that troops under fire neglect to abide by this rule, but a severe chastisement invariably ensues.

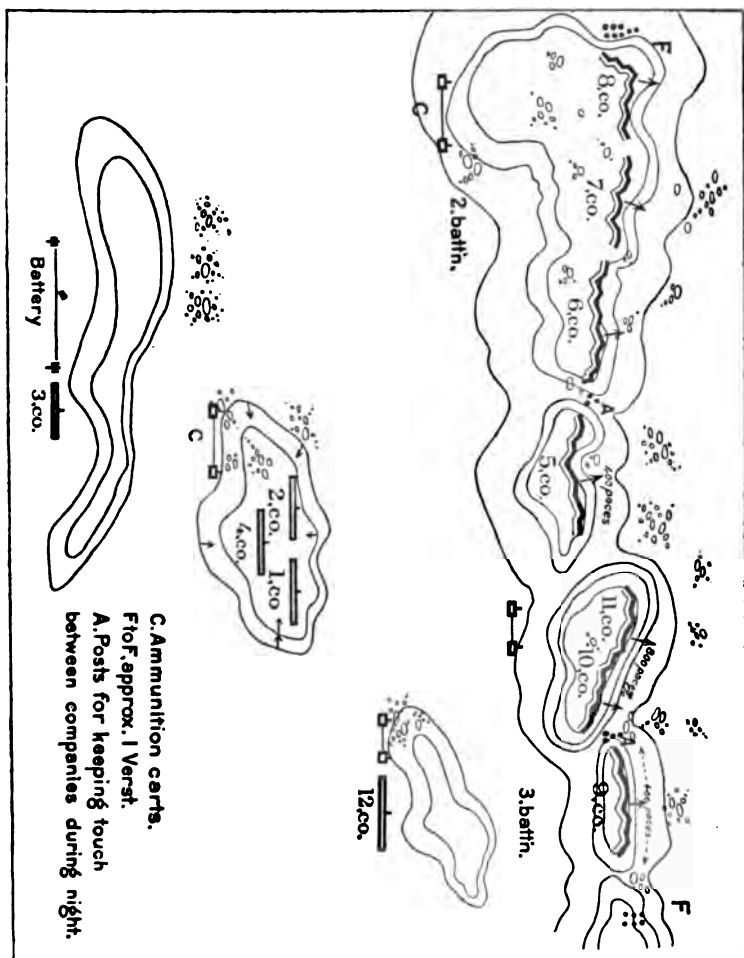


FIG. 1.—Distribution of regiment, in position.

I witnessed the following at Mukden on September 28:

A battalion of the "N" Rifles Regiment was to replace our regiment in our position, while we were designated for the attack. It was still light, about 5 p. m., and the fire on both our side and that of the Japanese had slackened. I began

to scan the neighborhood through my field glasses and saw suddenly most clearly and distinctly a column emerging some $1\frac{1}{2}$ versts (1,750 yards) in rear of us. It advanced slowly from behind a hill in column formation, by sections, to a wide, open plain of harvested kaoliang. The column was marching in excellent order according to peace time regulations: In front rode the commander of the battalion, followed by his adjutant, in rear of whom rode the commander of the leading company, while behind him marched the lines of the men. Suddenly something unimaginable took place—something which awed even those who were accustomed to battle.

It must be said that some half hour before, a Japanese battery, stationed in front of us, left its position and took up another position opposite our flank. We could see this change of position very well from our hill, and for several minutes we took advantage to open a fierce fire against the Japanese. The battery soon disappeared and opened no fire.

We had forgotten all about it. But it had noticed from a distance the column coming up to us, and hid and waited.

As soon as the first company emerged on the plain and had shown itself as on the flat of the hand, it was suddenly encircled with the smoke of shrapnel explosions as with a mist. We could see clearly how the projectiles burst in the very center of the column, dispersing the men; how they surrounded it as with a circlet of flames; how they exploded right in front of the column, in the very faces of the men; and how, as the troops advanced, the projectiles shifted, not losing aim for an instant. For some minutes the column marched through the smoke, but as soon as it disappeared in rear of a hill the fire ceased. But a long row of black, immobile figures was left behind. These few minutes cost the battalion several tens of lives. The fire lasted some five or six minutes, and we counted approximately some 60 shrapnel fired at the men.

The following companies proceeded at a run, according to the generally adopted formation, and arrived safe.

War is terrible, through the fact that every mistake, every error, brings about immediate punishment and often very severe chastisement.

MOVEMENTS IN THE ZONE OF RIFLE FIRE.

Such is the formation for movements under artillery fire and such is likewise the formation for marching under rifle fire. I am going to digress here, to say what "effective" rifle fire is and how it is understood by our regulations. According to the latter, "effective" rifle fire begins at a range of 1,000 to 1,400 paces. The Regulations say little about fire at longer ranges, except as used in particular cases, and in fire by volleys. In fact, the theories of the Regulations correspond but little to reality.

At a range of 2 versts (2,333 yards) rifle fire is now effective. This is plainly shown by the losses incurred by the company, and at a range of 1 verst (1,166 yards) the fire reaches enormous power. What can be done if we follow our Regulations and do not open fire at long distances? The enemy does not follow our Regulations, and showers bullets upon us. Shall we fire at large targets? But where are those large targets, when we positively see nothing and nobody? If by "effective" fire is meant fire which causes losses, then rifle fire is effective at the longest ranges given by the sight. It would be very well indeed if the arrangement of the sight allowed us to take advantage of the long range of our rifle to the utmost degree admitted by its ballistic data.

Experience proves that "effective" rifle fire begins at a range of 2 versts (2,333 yards=3,000 paces).

If the fire is strong, open terrain is crossed in the same manner as under artillery fire, by a chain, the men running singly at 10 paces interval.

DEPLOYMENT IN CHAIN FORMATION.

The deployment in chain formation is taken on reaching the zone of artillery fire, but local topography sometimes allows us to bring the column nearer the enemy under cover of hills. It happened sometimes that columns approached within several hundred paces of the position selected for the combat.

This is, however, a risky procedure, because the hills do not always afford cover against rifle fire, and shrapnel easily flies over them.

It must be a general rule to deploy into chain formation some 2 versts (2,333 yards) from the hostile position.

As to the distances between the firing positions of the opposing forces, they vary from 2 versts (2,333 yards) to several hundred paces. During the September battles before Mukden our companies were sometimes obliged to occupy positions so close to those of the Japanese that one could clearly hear the Japanese conversing, quarreling, and scraping the earth with their spades as they dug their trenches.

The entire company is deployed in a chain (line of skirmishers).

The company reserves are of no importance; they always incur losses, while they diminish the possibility of developing at once a strong fire, which might silence, or at least weaken, that of the enemy (a similar principle to the one adopted in the artillery). Rifle fire is so strong that a small unit will at once lose many men; there will be scarcely any rifles left and the fire will be ineffective.

It must be remarked that not only companies, but entire battalions are often deployed as skirmishers, so that there remain only the regimental reserves.

The chain starts at once at a run. If the chain is formed in rear of a hill or any other cover, it advances according to Regulations—deploying to the front. If it moves over open terrain, the men advance singly at a run, creeping, bent as low as possible, and take advantage of each fold of the terrain.

No march under fire is effected at full height, but the men bend; even the hills within the zone of rifle fire do not always give protection from bullets. A mass of spent bullets fall at times, others come from the flank, and if the hostile position occupies higher ground, the bullets fly over the inner, Russian side of the hills, and in such numbers that the best way to avoid them is to run as fast as possible to the position and lie down.

The nearer the crest of the hill the more do the men bend, and they often reach it creeping.

The formation of the reserves is, depending upon the cover, generally a deployed one. The order of march under fire is similar to that of companies in battle formation.

CONDUCT OF FIRE.

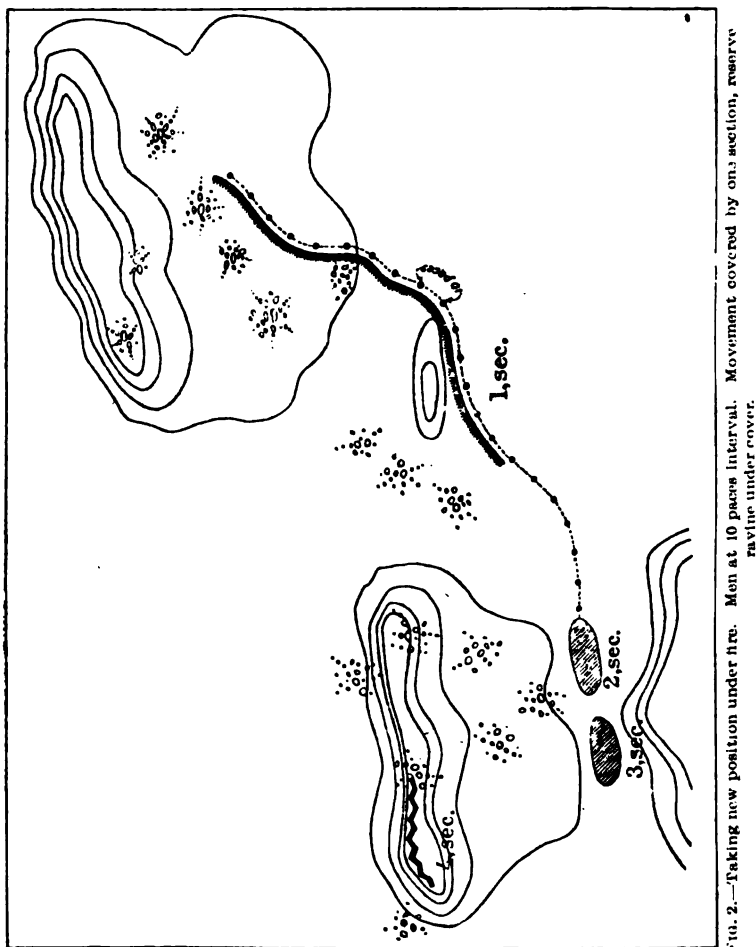
The conduct of fire (fire control) in battle is a difficult thing. The men strive to open fire immediately upon taking up their position, even without awaiting orders to fire, the designation of the objective range, or the kind of fire.

This haste is, first of all, brought about by the desire of drowning the consciousness of danger through increased activity, yet this is what most impedes the effectiveness of fire, the maintenance of order in battle, and fire discipline. It is difficult to stop such fire unless the men have been held well in hand before. It is almost impossible to hear the voice of command in the rattle of rifle fire, the explosion of projectiles, and the thunder of artillery. It was often necessary to shout commands into the ears of the men. Remembering, too, that the front is some 400 paces in extent, never less, and it may easily be seen that a company commander can give no intelligible commands to the chain. It must be remarked that the conduct of fire is rendered much more difficult by the increased extension of positions in the mountains. This may be explained by the circumstance that the gullies, ravines, and canyons among the hills are not occupied by the chain; also partly by the desire to take the enemy in the flank, and by the fact that modern rifle fire, even with extended positions, presents a fiery obstacle that can be surmounted only with great difficulty. (See sketch No. 2.)

Even the platoon commanders are often impeded from commanding their units, and therefore it is sometimes necessary to desist from volley firing and to revert to firing by clips (magazine fire). A whistle, repeated by all the non-commissioned officers of the company, is heard best of all. It is therefore of the utmost importance to teach the men beforehand to obey the whistle. It can not be said that this always takes place in reality. But much can be done with firmness and decision, and fire may be stopped along the entire line during the fiercest of battles at a whistle from the company commander.

The fiercer the hostile fire and the nearer the enemy, the more difficult it is to control the fire, especially in defensive action. The men grow more anxious, the tension of their nerves more intense, and the danger seems to grow nearer

and greater with the approach of the enemy. It is most important at that moment to keep the fire discipline well in hand, and to observe narrowly and see that the firing shall not be transformed into aimless rattling of rifles, which betrays the fact that control has been lost over the company.



for in such moments it is impossible to vouch for what the company is going to do.

It is on this account that it is so difficult to keep fire discipline well in hand during a battle, and to maintain a reasonable and well-sustained fire.

These difficulties are greatly increased during the night, the nerves are specially unstrung, and in the darkness it is impossible to see the enemy or our own men. No voices are heard, and in walking along the line it is easy to stumble and fall, while unaimed fire sounds without intermission, rattling along the entire front. From the direction of the enemy a fierce fire is likewise opened, and for hours the ear-splitting noise of musketry is heard through the night. It is exceedingly difficult to stop such firing. As soon as it has been stopped on one flank, and while going over to the other the rattling is again resumed on the former flank. The officer runs again to that point and the fire is silenced. He asks: "Who fired? Did you not hear my order not to fire?" Excuses are given: "We did not fire; it is in the second platoon." And a shot is again heard quite close. The thought arises that the men are firing involuntarily.

Sometimes a man will fire in his sleep and hundreds of shots follow, thus bringing about a useless loss of cartridges, a sleepless night, fatigue, nervous tension, wounded and killed by stray bullets. And there is before the men the prospect of days of battle.

The greatest obstacle is the nervousness which pervades even the troops who have been under fire.

Only by excellent training during peace time and with such discipline in the chain that not a single man shall fire until the order has been issued, and that the command and whistle shall immediately make them cease firing, can order in the chain be maintained and effective fire be obtained.

One of the best means to insure order in the chain is firing by volleys, but this, as has already been said, is not always possible.

The main principle lies in the preparation of the men during peace, and errors in this respect are shown in combat very clearly and in relief. In order to rectify these mistakes we were obliged to train the men in extended drill while in bivouac. These exercises were of great assistance. It is, however, not always possible to exercise the men; the works for the fortification of positions, the arranging of fording places, reconnoissances, etc., forcibly curtail these precious lessons under the fire of the enemy.

As to individual fire, it is rarely used, but is sometimes resorted to by picked men to shoot down individual hostile soldiers.

DEVELOPMENT AND STRENGTH OF RIFLE FIRE.

A tangible idea of the development and strength of rifle fire may be had by the enormous losses incurred by troops in battle and the percentage of losses from infantry fire; it greatly exceeds, as formerly, the losses from other arms, averaging 85 per cent of the total loss.

The great expenditure of cartridges in actual warfare is an excellent indicator of the strength of modern rifle fire. This expenditure is so large that, as far as I know, the ammunition chests of the Siberian troops follow the regiment in the ammunition train of the first line. The necessity of this measure is evident to all those who have seen how cartridges melt in battle. Scarcely have several cartridge chests been brought to the regiment when they are empty.

The expenditure of cartridges in this war will prove immense.

I know, through the computations of the officer in charge of the ammunition of our regiment, that it fired at Liaoyang 1,200,000 cartridges. It is still more evident by the fact that after uninterrupted firing, which sometimes takes colossal proportions, the stocks of the rifles are charred and the ends of the bayonets grow crooked from the heat to such an extent that they have to be taken off so as not to impede the firing.

Such is the strength of modern rifle fire, a stupendous force. It was difficult to conceive before the war what dimensions it had reached in our time. It is true that with such intensity the fire suffers in effectiveness, and a mass of bullets is spent in the air. There arises involuntarily the question: Would it not be better to fire more slowly, but with greater accuracy and better aim? But the fact is, that the long ranges at which fire is opened, the entire *mise en scène* of modern warfare, when the enemy is often positively invisible, forces one to have recourse to intensity of fire, to shower a rain of bullets upon a certain area. This mass of fire must make up for lack of accuracy of aim. We must likewise add that the short term of service tells upon accuracy and trueness of aim.

It is necessary to remark that there exists an important condition as far as accuracy of aim and effectiveness of fire is concerned; the distance of the objective must be determined exactly. This is difficult in battle.

The Regulations recommend: Firing until the range is found, determining with the eye, with the range finder, or by questioning the neighboring artillery. In battle only the first two recommendations may be resorted to.

The range finder (the Regulations recommend that of Souchet) is absolutely inadmissible, on account of the complications of its adjustment, the unsatisfactory results obtained, and the special conditions governing its use (signals, distinct and prominent local objects).

Where can these signals and landmarks be found? Often they do not exist at all. To place a soldier under fire for this purpose, is to send him to absolutely useless execution, for a level plain is needed for the measuring by paces, when in reality the terrain is broken.

In addition to this the entire complicated methods of the Souchet range finder is, like all other complicated things, not adapted to use in battle. Time, too, is lacking. The combined field glass and range finder requires for the determination of distances that a mounted or dismounted enemy shall wait until the range had been found by means of his height. This very rarely happens. Artillery is posted at a great distance and its targets are different.

Firing by volleys to find the range gives good results when the local conditions are favorable. This likewise does not happen frequently.

There remains the principal means—the eyesight. It is this mode of range finding that is used most frequently and by which the firing has to be guided.

This is why we deem it most important that during peace time frequent exercises should take place in estimating distances by the eye, taking advantage of each favorable occasion and not treating it as a tedious formality.

DETERIORATION OF RIFLES.

Frequent deterioration of rifles with the development of such intense fire is unavoidable. The breechblocks are those which suffer most frequently. There is but one means in

battle to replace deteriorated rifles—the utilization of those belonging to the killed and wounded. The bayonets are replaced, also the breechblocks, and sometimes the entire rifle.

The impossibility of cleaning the rifles, a thing greatly felt during the constant rains and the great changes in temperature in Manchuria, contribute likewise to the deterioration of rifles. During the dry season dust floats in clouds in the air and literally fills the grooves of the barrels and of the breechblocks.

The rifles are cleaned in bivouac, but lack of oil is greatly felt. It has been replaced by melted lard, but, in general, the rifles which I had opportunity to examine were greatly neglected.

The replacement of old rifles by new ones is made on a very economic scale. After the battle of Liaoyang only 8 per company were issued.

However, notwithstanding all these conditions of the modern *mise en scène* of warfare, actual observations show that great accuracy of fire can be maintained at a range of 2,700 paces (2,100 yards), only part of the company firing.

My company was once ordered to fire against a Japanese battery. It was, as usual, hidden from view by the crest of a small hill.

We were aware of its position, for the projectiles of our battery were exploding immediately in rear of that hill, and we could see from time to time the small black figures of the Japanese appear on the crest.

Fire was opened by volleys in squads at a distance of 2,700 paces (2,100 yards). We could clearly see through the field glasses how dust was raised after each volley along the crest. It was evident that the men aimed well. But what proved the effectiveness of our fire still more was the fact that the Japanese battery suffered our fire for some half hour and then suddenly showered shrapnel and finally shell upon us. Such a fearful thundering arose from the explosions of the shells that it was necessary to resort to firing by clips (magazine fire). The position of the company under the fire of the battery grew very serious. Fortunately our battery supported us with its fire. The Japanese artillery finally left us in peace and was silenced.

REMARKS ON THE JAPANESE ARTILLERY AND INFANTRY.

The Japanese ceased firing whenever they realized that their range had been found; such was the procedure in both artillery and infantry.

It is evident that the Japanese have adopted as a principle, to cease firing under well-aimed fire of the enemy. If our battery had found the range of the Japanese battery and aimed well, the Japanese immediately ceased firing and endeavored to change position unawares. The chain of sharpshooters did the same. In order to conceal their retreat, they put up dummies instead of men and wooden logs on broken wheels instead of guns. But these subterfuges were soon found out by us. The dummies are conspicuous by being placed at easily detected points at full height, while no Japanese will ever stand erect and immobile under fire, but rushes on quickly and hides. In this case we have taken some lessons from the Japanese. Our batteries have likewise ceased firing under well-aimed fire of the enemy and changed position. The artillerymen explained to me that change of position was made because the men grew nervous, did not aim, nor set the fuses under fire calmly, and that, consequently, it was better to change position or to hide in the trenches, awaiting the moment when the hostile battery shifted its fire against another target or ceased firing, being convinced that the enemy had been silenced, and to then shower a hail of projectiles upon it.

The best plan is to change position without being noticed, but it is still better to take up such a position under cover that it is impossible for the enemy to find it. For this purpose one gun is sometimes placed on the crest of a hill which it is not proposed to occupy, and rapid fire is opened from that gun. When the enemy begins to answer, observations are taken, his position and range are ascertained, and when the whereabouts of the hostile battery is more or less accurately known, it is suddenly overwhelmed with the fiercest of fires. Before the enemy has time to come to his senses, to find his opponent and his range, he will suffer such losses that all he can do is to get from his position as fast as he can or to hide.

In general the victor is he who has succeeded in taking the other unawares. A great rôle is played here, not only by accuracy of aim and knowledge of the locality, but by ingenuity, presence of mind, and common sense. The one is trying to deceive the other. The same may be noticed in the infantry likewise; sometimes under well-aimed artillery fire the chain creeps down unnoticed and hides in a well-sheltered place, leaving only the sentinels in position, or changes position without being detected, while the enemy continues to thunder against the former position.

Much is said about the accuracy of aim of the Japanese artillery. It is explained by the skill of the Japanese artillerymen, and by their knowledge of the locality and of the conditions of mountain warfare. It is said that they have excellent maps, which give them the opportunity of accurately determining distances by means of a compass. At any rate, it is impossible to explain their superiority in accuracy by the superiority of their material over ours; our artillerymen are unanimous in saying that our guns are excellent, much better than those of the Japanese. But the Japanese had been learning the ways of their guns for many a year before the war, while in our army some of the units made the acquaintance of the guns on the road and many were taught gunnery in the railway cars.

In general it must be said that the accuracy of aim of the Japanese artillery is above criticism. It was noticed more than once that the Japanese battery found the target at once without having to fire previously so as to get the correct range (ranging). I remember how their battery hit with its first shot the chain on our hill. I saw how the battery followed with shrapnel the mounted volunteers, galloping at full speed over the hill, and how it put 12 riders and 19 horses *hors de combat*; and I know how 2 officers and 32 privates were disabled within half an hour in our battery. It is likewise well to note how the Japanese batteries watch their infantry, and how energetically they support it, not only when the hostile artillery is playing havoc with it, but also when they notice that from one of the infantry-firing positions a particularly well-aimed and well-sustained fire has been opened. The Japanese battery immediately opens fire against such a position, thus proving a mighty ally of its infantry.

As for our artillery, it had to operate under absolutely new and unknown conditions. Having been taught during peace time to select positions on crests of hills, it suffered great losses during the first period of the war, almost useless losses, but it soon learned to adapt itself to the new requirements of modern warfare.

An absolutely new factor in artillery combat was firing against invisible targets. In present battles, the battery does not see its opponent and at the same time is likewise invisible to the enemy. Hidden in rear of a hill, or rather separated from the enemy by a whole row of crests, it strikes and incurs losses without seeing the target against which it is firing and from which projectiles are showered upon it.

We saw more than once how our batteries vanquished the Japanese artillery at Mukden. The fire of the Japanese batteries was not nearly so fierce (relatively), as at Liaoyang, which was chiefly felt by the infantry. According to the experiences of former battles, what we feared most was that our artillery would cease firing, for then the Japanese batteries fired with impunity against the positions of the infantry regiments, and we suffered heavy losses. Justice demands that the difficult conditions be noted with which our artillery was confronted, and from which it emerged with great credit.

The Japanese infantry is far behind the Japanese artillery in accuracy of aim. The Japanese infantryman may, with good reason, be called a machine gun, on account of the rapidity with which he loads and fires his rifle. But that most of the bullets fly over the heads of the enemy is likewise true, because he does not aim well. I have personally noted how, in attack, the Japanese, placing his rifle on his knee or on the breastworks, rattled with marvelous rapidity at his breechblock without taking any aim whatever.

During the night attack of September 29, when our companies advanced like a wall, in platoon columns, the Japanese met us with fire up to the last moment before the bayonet charge, firing almost up to actual contact. Notwithstanding this, we had very slight losses, because the bullets flew in clouds over our heads. If, in spite of this, losses from rifle fire are great, it is because the Japanese have adopted for the infantry the same principle as for the artillery—that of showering a mass of fire upon the enemy. In reality

the bullets come like hail, and the Japanese artillery fires not only against important and large targets, but it often happened that a battery opened a running fire against single men. It is evident that the expenditure of cartridges and projectiles must be enormous in the Japanese artillery, though not always bringing good results. Thus at Liaoyang a Japanese battery showered projectiles for two hours on an area where there was only one officer placed for observation. The fire was so intense, according to the words of an eyewitness, that the ground was all torn up by the projectiles, presenting the aspect of a plowed field. Such cases of ineffective expenditure of a mass of projectiles are quite frequent with the Japanese principle of firing against areas.

It likewise happens, as at Tashihchiao, that the Japanese artillery is forced to cease firing because all its projectiles have been expended.

Such expenditure can not be thought of in our army, for with a line of communication of 8,000 to 10,000 versts, our artillery would have been without projectiles in a very short time.

EFFECTIVENESS OF FIRE WITH VARIOUS PROJECTILES.

As regards effectiveness of fire with various kinds of projectiles, the first place must be given to shrapnel; it is very difficult to find protection against it. Shallow trenches for firing in lying-down and kneeling positions give but little shelter. The best are man-deep trenches, of which more shall be said later.

Apropos of high explosive shells, much has been said about the *shimose* shell. This projectile, according to my opinion, is least effective against live targets. It bursts into very small fragments, almost into dust. It does but little damage, but the noise is fearful and its explosion throws up a great column of black smoke, mud, pebbles, and fire, which produces a great impression upon inexperienced soldiers. The moral effect is absolute.

As to lyddite projectiles, it must be said that the gases generated are very noxious and poisonous, and long and serious diseases are brought about by lyddite poisoning. Its effect does not develop at once, but several days later, and brings

about loss of hearing, smell, taste, impairs the eyesight, and often results in paralysis and long fainting fits.

Convalescence is very slow and there is always the question if a cure is permanent.

A lyddite shell may be recognized by the yellowish green tint of its smoke and by a strong, disagreeable odor when it explodes.

THE COMPANIES DETAILED TO SUPPORT ARTILLERY.

Speaking about the artillery, something should be said about the companies detailed for its support. In the orders issued for the Manchurian army it was directed that for each battery 2 companies should be detailed as support. It is evident that a support is indispensable; infantry, in general, is a necessary ally to artillery: on the march it frequently helps to extricate the guns, to surmount obstacles on the road, and in combat unsupported artillery often risks falling into the hands of hostile artillery or infantry. There were cases of capture of guns on our side as well as on that of the Japanese, thanks, usually, to the fact that at the moment of danger, the batteries had no protection, no infantry supporting them. But the detail of companies for the support of artillery is a great, though unavoidable, evil to regiments. If from 3 battalions 2 companies are detailed to the artillery and 1 to the train, the regiment loses not less than 500 bayonets. This is a great loss, a loss that can be felt. This is why I deem most worthy of attention the opinion which has more than once been debated in the press, that of organizing companies for artillery supports during peace time. The advantage is self-evident; the regiment does not lose any large amount of its fighting strength; the supporting companies, forming one unit with the battery, will get accustomed to it and become its staunch assistants and defenders, and, in case of losses among the gunners, may take their places. All this is of great importance to the battery itself.

THE GENERAL CHARACTER OF MODERN INFANTRY COMBAT.

Speaking of the characteristics of modern infantry combat, we note the following general traits: The deployment of large units as a skirmish line; the absence of small partial

reserves; the desire to develop at once the greatest intensity of fire; the advance of skirmishers at a run, bent double, and sometimes creeping; the advance under effective fire one by one; the movement in the zone of fire in chain formation; the difficulty of controlling fire and the necessity of developing fire discipline in time of peace; the unparalleled development of rifle fire; the immense expenditure of ammunition; the necessity for an uninterrupted supply of cartridges to the fighting line and a close touch of regiments to the artillery parks; the deterioration of rifles and the necessity of replacing them frequently; as a rule, enormous losses in infantry combat and the tenacity and duration of infantry combats without decisive results.^a

THE ATTACK AND BAYONET CHARGE.

Let us now take another phase of infantry battle, the most decisive of all, for which preparations are made not only for several hours but several days, and the result of which gives always a decided and final preponderance to one side or the other. I mean the bayonet charge.

^a We must make note here of an anomaly in the Field Service Regulations which tells in war. When a sentinel is posted from the chain or in security service, endeavor is made to place him so that the disposition of the troops can not be detected. But according to the Regulations a sentinel is not allowed to sit or lie down. In reality the placing of a sentinel under fire at full height is to send him to be shot—he will soon be killed by the enemy. Therefore the sentinel should be either kneeling, sitting, or lying down; he should stand only in rear of good cover or when the enemy is distant. It is imperative to insert in our Regulations permission for the sentinel to sit or lie down in case of need. Moreover a man lying down can more easily detect the noise of approaching footsteps along the ground.

We must likewise observe that the outposts at night should be stronger. The companies of the fighting line send out patrols and outposts during the night. If the outposts are weak (4 to 6 men), it is difficult to expect calm and reasonable reports. Darkness and the vicinity of the enemy, and the strain after battle, bring about an anxious feeling, and each shot, a single enemy, the approach of a hostile patrol seems the advance of an entire column. The best means to avoid false reports and alarms is to strengthen the outposts to such an extent that they shall represent a certain force. When, through actual experience, the outposts were strengthened to 10 men, the character of the reports was altered, the men grew calmer and more firm, and the unreasonable, continued reports, "a column is advancing," were replaced by reports of the approach of patrols and single men.

THE IMPORTANCE OF THE BAYONET.

Before taking up the technical discussion of the attack, I shall say a few words about the bayonet, over the importance of which obstinate discussions are taking place even at the present moment, although the present campaign has given so many decisive facts in its favor as practically to preclude discussion.

As a participant in bayonet charges, I had occasion to see how the bayonet in a few short moments took trenches, against which thousands of bullets were fired in vain for three entire days. I have seen the condition of mind of the victorious soldier, noted his elation after a bayonet attack, and how decisive and relentless is the struggle from which emerge only the living victors and the dead vanquished. There is no middle path.

It is strange to hear opinions disparaging the bayonet, or giving it only the casual importance of an accessory to the rifle. The fact remains, the bayonet has been highly serviceable during the last campaign, and it is not a mere coincidence that not a single important battle has been fought without a bayonet charge.

Study the fighting records of the present war and you will see that almost every regiment has fought with the bayonet and that the regiments who were in the theater of war from the beginning of the military operations have several times made and received bayonet attacks. It is sufficient to say that on September 29 and on October 1 and 3, a bayonet fight was raging along the entire front of our enemy. Entire corps fought with the bayonet. Such facts can not be disputed.

It has been maintained that fire is sufficient to repulse an attack, giving as an example the fact that our attacks as well as those of the Japanese were repulsed by fire with great losses to the attacking party. Such instances have taken place, it is true. But why are not those examples quoted wherein the attack could not be repulsed by fire and the enemy ended by taking to the bayonet? What shall a unit do in such cases, which does not know how to fight with bayonets? Will it be able to withstand the approach of the enemy to the distance needed for hand-to-hand combat?

On the other hand, I shall permit myself to ask: Were positions, fortified ones especially, taken by fire? No, if

such positions were abandoned by us, it was done in obedience to orders, and not by reason of the fire of the enemy.

The Japanese attacked our regiment at Liaoyang several times on August 17 and 18. It is true that they suffered great losses from our fire, especially when they advanced in column formation. Their companies and battalions literally melted away, leaving whole heaps of dead behind. Several times, after having approached us to a distance of some 300 to 400 paces, the Japanese turned back in disorder. But on the other hand, in that same battle they more than once went so far as to charge with the bayonet, and fierce hand-to-hand fights ensued.

If our soldiers were not taught to look upon the bayonet as a final and inevitable recourse in each battle, he would probably abandon his position and not attempt to repulse the enemy with the bayonet.

The Japanese did not force us to abandon a single position at Liaoyang by fire. And the fire was indeed fierce. After silencing our artillery, the Japanese could operate under most favorable conditions and literally covered us with projectiles.

Our regiment lost 18 officers and about 700 men. But notwithstanding two days of this sweeping rain of bullets, the Japanese could not dislodge us from a single one of our trenches. If we left Liaoyang in the end, it was not the Japanese fire that made us do it.

During the September fights at Mukden, both ourselves and the Japanese, lying in our trenches, showered bullets and shrapnel against each other, suffered losses, and knew no rest, either by day or by night, but neither the one nor the other side lost an inch of ground. It seems to me that such a situation may last indefinitely, merging into an immobile position fight, leading to no decisive result in the end.

On the other hand, in the night attack of Tuminlin Pass three lines of intrenchments were taken with the bayonet, and those of the defenders of the trenches who had not fled remained on the spot.

The educational meaning of the bayonet can likewise not be passed by without notice, its very destination and arrangement rendering it imperative to meet the foe breast to breast and awakening the desire to rush forward, gives an idea of the fire fight only as a preparation for the final bayonet

charge. The soldier, educated in such ideas, will not fear to meet a bayonet attack and will not himself hesitate to charge.

Much has been said about the Japanese way, so new to us, of meeting bayonet attacks—that of running back when our men charged and then opening fire on them. The Japanese acted thus at Turenchen. This mode of defense captivated some.

It seems to me that at maneuvers, on the drill ground, where there are no bullets or shrapnel, such a mode may seem desirable. But would such a maneuver not be too risky in battle? And if the unit should run away in reality? This is possible. Moreover, how can such maneuvering be adapted for the defense of a fortified position when the enemy makes a bayonet charge? Run back, abandon the fortified positions to the enemy and then retake them by fire?

Is it not due to the fact that the Japanese at Turenchen adopted this sly maneuver that our two rifle regiments (the Eleventh and Twelfth), surrounded by an overwhelming enemy, were able to retreat instead of being absolutely crushed? This might have been their fate had the Japanese charged with the bayonet. There is another example, during the attack on Putilof Hill, when the Thirty-sixth Regiment charged with the bayonet, and the Japanese forgot or had not time to fix bayonets and were all stabbed to death.

It is very significant that the Japanese soon desisted from this maneuver. At both Liaoyang and Mukden the Japanese charged with the bayonet and received bayonet charges with counter attack. The result was that the Japanese having experienced the effect of the bayonet upon themselves changed their opinion on this subject and learned from us how to use it, while we are still squabbling over its importance. The statistical data on losses caused by the bayonet are likewise very convincing. These losses are almost as large as those caused by artillery fire, in spite of the enormous development of the latter.

Such are the indisputable facts given by the present conflict. This war did not bury the bayonet; on the contrary, it demonstrated most vividly all its power and moral importance, which, it is probable, it will maintain unaltered as long as there are wars. Victories will be gained, as always, by the strength of the spirit.

ADVANCE IN CHAIN FORMATION.

Experiences gained in battle, especially in that of Liaoyang, where the Japanese were repulsed along the entire front and suffered great losses, showed what losses are liable to be incurred by troops attacking during daylight. To decrease the number of losses in the chain, as has already been said, the men run over one by one, as much under cover as possible. On this account it frequently happens that the chain is formed suddenly at a new close distance, and only sudden fire gives notice of the proximity of the enemy. The locality does not always render it possible to approach so covertly and unobserved, but in the mountainous region of Manchuria, where there is much brush, rolling hills, and rocky ranges, such maneuvers are often used with success.

An advance to the attack over open terrain always carries great losses in its wake.

RESERVE FORMATIONS.

The reserves advance sometimes in column formation.

In the mountains it is sometimes possible to bring them forward without incurring great losses, but on open terrain the movement in column formation of reserves (not only regimental but divisional) brings about disorder and disorganization of the units, on account of the great losses incurred. Movements in deployed order, though incurring lesser losses than in column formation, are likewise risky.

During the battle of Sandepou, in January, our reserves suffered such losses that it was necessary to deploy them before they had melted entirely. But in general it is much better at the outset to adopt dispersed order for reserves under heavy fire.

THE LAST FIRING POSITION.

The last firing position has not at present been pushed back, but has been brought forward. According to our Regulations it is located at from 300 to 500 paces from the hostile position. If a bayonet charge is begun at such a distance it is most doubtful that many will reach the enemy; the greater part of the men will be shot down, while the rest will run back. If the defender does not lose his

head and fires several volleys, the attack may be considered as lost.

The last stand is generally made at some tens of paces from the enemy. The men often remain a very long time in this position, because neither the one nor the other side can resolve to make the attack. Sometimes the hostile lines are at a distance of from 15 to 20 paces from each other, and remain so until a few bold men rush forward, shouting, against the trenches. These are followed by some 20 of the more resolute, and in rear of these rushes the entire company. Then one may be sure that the company, which thus charges with the bayonet, will not yield. But it is the officer's duty to make the most of that moment, and not to allow the élan to cool, by giving his personal example, for never will men follow a private as they will an officer. But the officer gets the first bullet and the first bayonet. This is why our officer's corps has incurred so many losses.

The Japanese army, as well as ours, has adopted for meeting the attack the following maneuver: To withdraw to some 10 paces in rear of the trenches, so as to leave between the enemy and the defenders an obstacle, the trench, and then to rush upon him with the bayonet while crossing the trench, taking advantage of the momentary disorganization of his lines.

It seems to us, however, that shallow trenches can not be a very serious obstacle; moreover the attack does not always charge with the bayonet even at short range, and then it is necessary for the defender to cross the trench for the purpose of repulsing the enemy. Otherwise it might happen that the two parties might remain for a long time shooting each other down at close range.

The general rule before a counter attack is to fire one volley at close range and then to charge with the bayonet.

It is necessary to say in conclusion a few words on the great importance of night attacks at the present time. This importance may be easily understood if we take into consideration the fact that the defender is bereft of such a mighty ally as the fire of his artillery and rifle fire at long range.

During the period of the September and October battles before Mukden our troops made night attacks.

In addition to the enormous advantages over day attacks as regards losses from fire, night attacks allow the troops to be led in compact masses; in a word, so to speak. Thus, for example, on September 29 our regiment marched in platoon columns without intervals. The men march bravely, because they suffer no losses at long distances and those incurred at close range are relatively small. Moreover, they attract little attention, and the feeling of nearness to each other and of compactness and numbers give a sense of security and encourage the weakest.

The defense, however, feels the approaching danger, but does not see it; this condition of ignorance and nearness of the impending blow can not but impress them unfavorably. It, therefore, often happens that before the bayonet charge, the men leave the trenches, first one by one and later in groups. I had occasion to note personally how, before our attack with the bayonet, the Japanese, one by one, threw down their rifles and ran from the trenches (September 29 and October 12).

On the other hand, the disadvantages of night attacks are the difficulties encountered in orientation, direction of the blow, and conduct of the troops.

It is indispensable to reconnoiter the locality during the day, and for each and everyone to know his rôle and designation. This is, unfortunately, very often neglected.

GENERAL CONCLUSION ON MODERN ATTACKS.

Attacks made in daytime lead to great losses, even in case of success.

The advance is made by chains, at a run or singly by the men, as covertly as possible, under protection of the folds of the terrain and other local objects. The reserves may follow in column formation, but protected by the necessary cover; on open terrain and under fire the reserves advance likewise in dispersed order in the second line. The last stand is made at a distance of a few tens of paces from the enemy; it is not always possible to induce the company to charge with the bayonet; it is indispensable to give a personal example and to catch the right moment. The result of a bayonet charge is always prompt and decisive.

SPECIAL SIGNIFICANCE OF NIGHT ATTACKS.

THEIR ADVANTAGES; DECREASE OF LOSSES BY FIRE, COMPACTNESS OF THE ATTACK, MUTUAL SUPPORT.

It must be kept well in mind that night attacks are made without firing a single shot.

As soon as the attack opens fire it means that the unit is no longer held in hand by the commander, that it has lost its resolution and order, and it is difficult to charge with such troops. In general the characteristic traits of the attack have not altered, but the losses have grown much larger. Cases of attack have not grown less frequent in the present campaign than in former ones and, as heretofore, the crowning of the battle is made with the bayonet.

THE TRENCHES.

Speaking of combat, it is impossible to refrain from making a few observations as to the meaning and development of field fortifications of all kinds as shown by the present war.

It may be remarked about the late campaign that the spade takes its place side by side with the rifle, and the spade has become a purely fighting weapon. In the very first moments after the occupation of a position trenches are dug, generally for firing lying down. If the position is prepared beforehand, the trenches are generally dug for firing in a standing position, with traverses and shelters. These works are undertaken by the troops themselves.

The erection of redoubts is likewise in great favor; they are supplied with breastworks which may withstand artillery fire and with artificial obstacles—barricades, pits, wire entanglements, and fougasses. All these works are made by engineers and sapper troops and we are not going to discuss them. We shall only observe that among all obstacles in field warfare wire entanglements have proved the most effective, being almost insurmountable and withstanding artillery fire exceedingly well. Wire entanglements present to the attacking party an obstacle very difficult to conquer. Among natural obstacles we shall point out the kaoliang. Bent at an angle about 1 arshin ($2\frac{1}{2}$ feet) from the ground, it presents such an obstacle to cavalry and infantry as to require the use of the hatchet to effect a passage.

We must remark that shallow trenches (for firing lying down or kneeling) do not give much shelter from the enemy's fire—shells destroy them easily and shrapnel hits from above; rifle bullets often ricochet, but this does not always save. The principal aim of these trenches is to hide the men from the eyes of the enemy; the marksman shows only his head and, thanks to screening, the trench merges into the surrounding locality and at a distance of even 1 verst (1,167 yards) it is often impossible to discern it. It is only betrayed if looked at from above by the black line of the excavation. Therefore, trenches make it difficult to determine the disposition and strength of the enemy and to find his range.

Best of all are the trenches adopted by the Siberian troops—of man's height and without breastworks. Such trenches disappear from the eyesight at several hundred paces and present a safe shelter from artillery fire, because the entire mass of ground between the trench and point of burst acts as a breastwork. The narrow opening of the ditch protects against shrapnel, and when the men sit on the step, leaning against the escarpment, they are almost entirely sheltered; for rifle bullets there is only a very insignificant target—the head of the soldier. The earth from the ditch is strewn all over the ground and is masked according to local conditions, with chumiza, beans, grass, or kaoliang (see sketch No. 3).

Such trenches are dug very rapidly and are absolutely invisible from a distance. It is very difficult to find their range.

The masking is of great importance at the present time. It is of great advantage, not only because it renders the finding of the range more difficult, but also because it hides the troops from the eyes of the enemy. Justice must be rendered the Japanese; they hide their trenches and fortifications in a most masterful way. But we have learned that lesson likewise. Sometimes false trenches are dug, old caps are fastened there, and sticks are placed in lieu of rifles. It often happened that both artillery and rifle fire were opened against such trenches.

Light blindages may serve as protection against shrapnel and bullets, and are often used in field fortifications. They are made of thin poles, 2 to 3 inches in circumference, covered with two layers of sod. They can not give protection against shells. It must be admitted that blindages have many opponents: (1) They obstruct the line of fire and require much

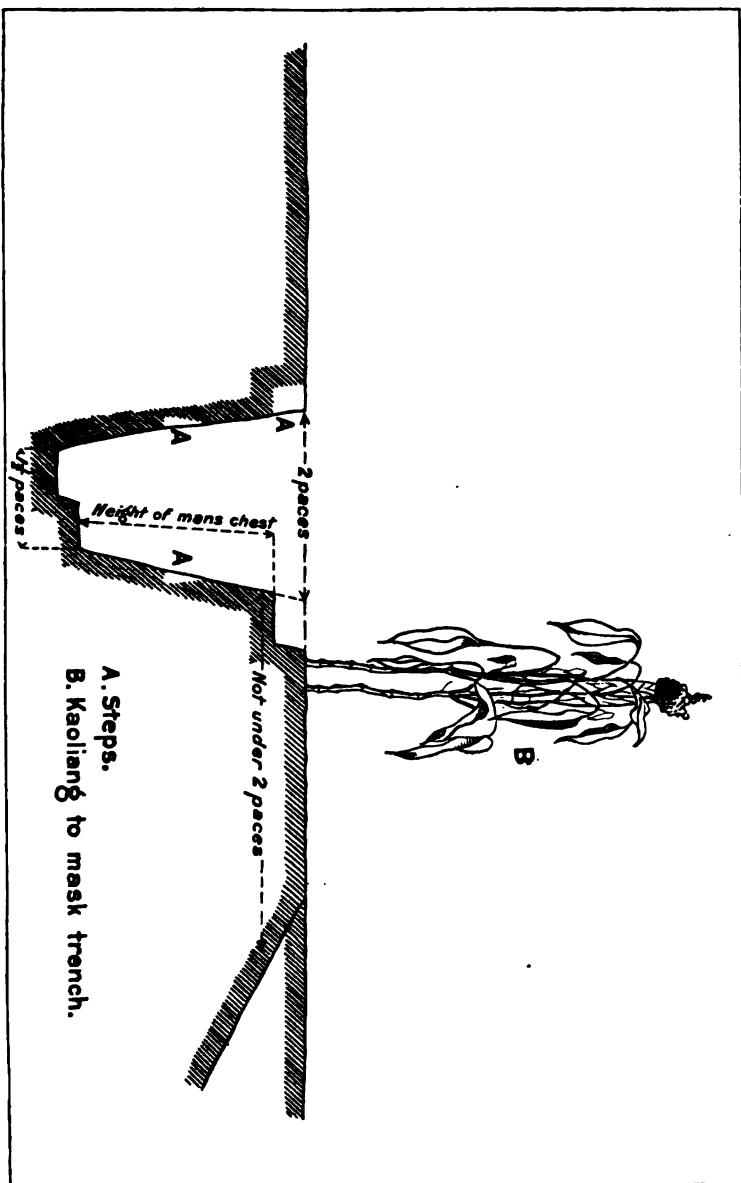


FIG. 3. - Standing trench, without breastwork.

time and material; (2) they are not of much use, for they are easily destroyed by shells; their number in the trench (2 to 3 per company) is too limited to give shelter to a large body of men, and there arises the question who of the company shall be hidden in rear of them? It has likewise been noticed that it is pretty difficult to assume the offensive from behind cover. This is deeply rooted in human nature and such blindages in field fortifications are merely temptations.

As far as intrenching is concerned, it must be said that the Japanese use trenches much more than our troops. Our soldier has not yet been imbued with the necessity and importance of digging trenches.

Our soldier, to lighten his burden, will willingly throw away his spade as a useless weight. Moreover, there are too few spades in the company. At Mukden our regiment possessed only from 3 to 10 spades per company.

Notwithstanding this trenches were dug almost constantly by our troops, especially during intervals in the fighting. It may be justly said that Manchuria is covered with intrenchments and that many thousand miles of trenches have been dug by our armies.

I had often heard, before I had occasion to see them personally, about the cleanness and beauty of Japanese trenches. But those I saw at Mukden can not claim those qualities. On the contrary, I found that the trenches built by our own men were more solid and cleaner than those dug by the Japanese. In general, the present war has shown the importance of earthworks in field warfare and the necessity of demonstrating their full meaning to the soldier in time of peace, and of teaching him to regard the spade as a faithful ally of the rifle and not as a useless burden. It can not be said that our soldiers before the war had a true comprehension of the importance of trenches and knew how to build them rapidly and well. Many of the new arrivals had to be taught under fire, thus showing that but little attention had been given to intrenching drills during peace maneuvers.

MACHINE GUNS.

In speaking about the present war it is impossible to pass over unnoticed this new weapon, which in a short time has shown itself to be the most deadly invention of military

ingenuity. These are machine guns. First used at Turenchen, they were extensively employed in all the following battles.

Light, mobile, occupying but little room, requiring not too much cover, they are easily carried by horse or men to the steepest summits inaccessible to artillery, and open from these points of vantage their well aimed and deadly fire. Easily manipulated, they soon find the range of the target, and once having found it, follow it uninterruptedly. It is possible to leave the zone of artillery fire by moving to one side for several hundred paces.

It is more difficult for a battery to change its aim and direction when the target is moving briskly, but the machine gun changes easily and rapidly the direction of its sheaf of bullets, literally covering the chain with them. A column falling under the fire of a machine gun can with difficulty leave the zone of fire and suffers enormous losses in a very short period of time.

In modern battles the harsh, broken rattle of the machine guns is heard uninterruptedly for whole hours, producing a disheartening and irritating effect on the men. In addition to the losses suffered by a detachment coming under fire of machine guns the enormous losses incurred in a brief period of time cause great depression. The greatest effect is produced, both morally and physically. It is not surprising, therefore, that the machine guns were christened by the men "the devil's spout."

HAND GRENADES.

Hand grenades, which may be called hand artillery on account of the effect produced by them, were first used by the Japanese for the repulse of bayonet charges. They are used only in bayonet fights, for the attack as well as for defense, and are thrown at a distance of 10 to 15 paces. The Japanese grenades which I had occasion to see were spherical in shape, having the diameter of a saucer. They burn with a bright, reddish flame, burst with a great noise, and scatter a sheaf of bullets. The wounds inflicted by them are far more serious than those made by rifle bullets. The defect of these grenades is their being easily extinguished while burning, which we did by covering them with sand.

Not much importance can be given to hand grenades in bayonet charges, as with a swift onrush they can do but little harm.

MARCHING MOVEMENTS, ARMAMENT, EQUIPMENT, AND SUPPLY OF PROVISIONS TO THE TROOPS.

CLIMATIC OBSTACLES.

Taking up the discussion of marching movements, we must first of all mention the causes which can not be set aside and from which both sides suffer equally. They are climatic, heat, reaching 40° Reaumur, bringing prostration in its wake; wind, raising clouds of blinding dust, hurting the eyes, filling the mouth and nose and penetrating everywhere, and rain, the worst of plagues, soaking the men through and through in a few moments and transforming with lightning rapidity small rivulets into roaring torrents and the roads into impracticable marshes. The mud reaches the breasts of the horses, covers the spokes of the wheels of heavy wagons sinking in the soil, and the men extricate their feet with difficulty from the sticky mud. Only Chinese *arbas* (mere platforms on two enormous wheels) survive the swamps and holes of the impassable Manchurian roads.

The draft horses get into most pitiful shape. It is painful to look at the artillery horses straining their last efforts to pull out a sunken limber or gun carriage, only to again stick hopelessly in the endless swamp a few paces farther. It is well known that we were obliged to leave some of our guns behind, because it was impossible to extricate them from marshy ground.

We had occasion after our retreat from Liaoyang to observe some fifty horses and several scores of shouting and screaming men endeavoring to pull a pontoon out of the mud into which it had sunk. The horses could hardly move their feet in the thick muck, and the men themselves could hardly stand up. I do not know how they succeeded in extricating the pontoon.

Therefore great losses and deterioration of material were unavoidable, and losses among the horse contingent were very great. Retreating from Liaoyang we met every hundred paces the carcasses of horses.

The mules and donkeys showed themselves hardier and less exacting, especially the mules—very strong and large animals. Both are often met with in the trains of the Siberian troops for draft and pack purposes. Small donkeys are often used as pack animals, and in spite of their small stature these dwarfs easily carry loads weighing 5 pouds. (1 poud or pood = 36.07 pounds.)

As far as I could gather, the mules and donkeys very successfully replaced horses in our trains.

In Manchuria formidable obstacles to military operations are met with in the numerous rivers and rivulets. Although the rivers, even such large ones as the Liao and the Hun, are shallow, their beds are covered with ooze. The infantry and cavalry find fords easily and cross over without difficulty, the water reaching in some places not higher than an infantryman's chest, but the vehicles impede the movements greatly, and the artillery requires that crossings be prepared.

The hills in southern Manchuria present a still greater obstacle. Their numberless ranges seem small and not difficult of passage from a distance, but as soon as one of these hills has been crossed another rises still higher and steeper. The crest which seemed so near, looms up high, the ascents and descents grow so steep and precipitous that the vehicles can have the brakes put on with difficulty and the guns are often overthrown. The strain upon men and horses is continually increasing, the progress grows slower and slower, until men and beasts stop exhausted. If we add to this, as during the Liaoyang combats, the intense heat and burning thirst, it is easy to imagine the cost of such passages over these hills. Here appears the full meaning of the causes increasing the difficulties of the campaign, causes that are removable, but which have not been removed.

REMOVABLE CAUSES—LACK OF PLANS AND MAPS.

It is easily understood that under the conditions of the campaign against which our troops had to cope in Manchuria each surplus hour, each surplus verst increased the burden and difficulties of the march, which frequently was a forced one. It often happened that the troops had to wander hither and thither over unknown roads on account of a lack of maps. The country north of Liaoyang was shown in the

maps as a large white spot. It often happened that for 2 or 3 hours the men marched in one direction, after which time they had to stop, as it was found that they had taken the wrong one. Much time was lost in looking for the right road and deciding if it was so. Then there came another halt and the same thing was repeated. The result was that, under the best conditions as regards weather, roads, and distance from the enemy, a march requiring 4 hours was made in 16 hours. Add to this the loss of time (sometimes 3 hours) waiting for the camp ground to be chosen, which under such circumstances could not be prepared in advance, and the march, which might have been a pleasure walk, was transformed into a forced one.

It may be said that for aiding in the selection of the bivouac and for finding roads, guides and interpreters could be used. But their usefulness seemed rather doubtful to us.

In reality each regiment, and sometimes each company, had with it several interpreters, whom the men called *vaska*.

Among them one could find grown men and children. The latter were the better; they soon learned the Russian language, grew attached to the regiment, were petted by the officers and men, and, on account of their vivacity, quickness, and reliability, could very well fulfill their duties, but as guides they were not well acquainted with the country. The grown men often did not know the Russian language sufficiently well and did not inspire enough confidence. When conversing with the local inhabitants they talked fast and in a lively manner among the numerous and curious crowd of Chinese. But what were they talking about? Perhaps they gave information as to our strength, whence we came, and where we were going. Such information was very well paid for by the Japanese.

It happened sometimes that the interpreters disappeared for a long time and then reappeared. To the question: "Where have you been?" came the answer: "I went to see my wife at Mukden." But we had to use even such interpreters as that, because we ran the risk of being entirely without anyone speaking the language of this foreign country, filled with spies and Japanese agents.

CLOTHING, EQUIPMENT, AND FOOT-WEAR.

The condition of the clothing, foot-wear, and equipment had no less influence upon the difficulties of the march and combat.

The soldier's gray overcoat is the heaviest article of clothing. Sufficiently warm to protect the men from the cold, in summer it is too heavy, and especially after a rain it is a great burden. But as there are no waterproof capes in the soldiers uniform some of the units did not part with their overcoats even with the advent of hot weather, and the soldiers were obliged to carry that burden.

The foot-wear consists of heavy and easily torn boots, which were absolutely impossible in summer and in the mountains.

On account of the difficulties of the campaign in the Far East, these boots, without exaggeration, may be said to have been transformed into heavy leaden weights. In walking over the slippery hills the soles slid and the feet slipped in different directions. Instead of two steps one had to make three. Moreover, they are air-proof and the foot was covered with perspiration, and a soldier's wet boot is hard to dry.

However, some organizations left the overcoat in the store-houses, preferring to get wet through, and even to freeze, to carrying along such a burden, and the boots were replaced by low, leather sandals. But no one has endeavored to replace the biggest burden, the greatest obstacle to free movements of the soldiers in battle and on the march—we mean the unwieldy clothing bag of their equipment.

These latter seem to have been invented on purpose to render the soldier incapacitated for battle and for the march.

These clothing bags tie the soldier down; they cut and hurt his shoulders; they change position on the march and knock against the legs on the run, often throwing the men down; during the ascent and descent of hills they pull the men back; when lying down the soldier must manipulate his clothing bag, which impedes him from finding an easy position; when rising he has to gather up and refasten the clothing bag, which has turned to one side; when he creeps it drags on the ground and is caught by objects on the road.

The disadvantages and inadequateness of our equipment were amply demonstrated in the late war. When ascending

the hills, even a lightly dressed and equipped officer felt, when midway up, that his breath was going fast, and dark rings danced before his eyes from the strain and heat, while his muscles were trembling like overstrung wires. The heavily laden soldier could hardly push one foot in front of the other, and went on automatically, until he lay down exhausted, notwithstanding the whistling of bullets and the exhortations of his officers.

More than one soldier fell during such moments, struck down by the heat, with a blackened tongue and upturned eyes. And how could this have been helped? The last drop of water has been drained long ago and the battle does not wait. Thus they were left to die under the burning sun.

During the Liaoyang battles some of the troops which had not yet been entrained, lost in this manner on marches and countermarches more than half of their contingent. There were companies which reached their destination with only 15 men.

The Japanese, on the contrary, is an aristocrat in comparison with our soldier. He is comfortably and well dressed, goes into battle in light equipment, and is not burdened with all his belongings.

Later on, when going into battle, we began to take off our equipments, leaving them with the reserves or on the position. It was thought that after the battle the soldiers could come back and recover their possessions. But in battle it is not always possible to return to the place whence one has started, or to go where one desires, and a mass of soldiers' equipment was left on battle fields which fell into the hands of the Japanese after the retreat.

As a result, our soldiers were left with nothing but what they had on, and the most indispensable articles were lacking. Moreover, this throwing away of the equipment contributed not a little to exempt the soldier from his habitual care of government property, and a certain slackness was observed in its stead. As it was quite difficult to prove whether the soldier threw his equipment away or lost it, the company commander had a sore problem before him.

As a result, there was a great loss of material, but as it was clearly evident that it was impossible to fight in the equipment, to ascend the hills and to attack them under fire, it was

necessary for purely military reasons to be guided by other considerations.

ARMAMENT.

We shall say briefly that our rifle in the present campaign stood the test most excellently, in spite of the many unfavorable circumstances which we have already mentioned.

We had occasion more than once to prove its accuracy. Great rapidity of loading is not particularly needed at the present time, since the expenditure of cartridges is enormous any way. One of its defects is the frequent difficulty in opening and closing the breech. Sometimes the end of the bayonet grows crooked on account of the heat; the cause lies probably in the tempering of the steel. But as a thrusting weapon, our bayonet is superior to that of the Japanese—a broad, flat knife, demanding great force when delivering a blow. This is why the Japanese does not thrust but cuts.

The armament of the infantry officer does not play so important a rôle as that of the private. The officer needs no weapon at all when in position, as he wields only the weapon of command and his moral authority. But in attack and in reconnaissance the officer must likewise use weapons.

The officer is armed with the revolver and the *shashka* (infantry sword). But the revolver is good only for seven shots, and then grows useless. It is absolutely impossible to unload and load a revolver of modern model during minutes where seconds are precious. There remains only the *shashka*, and this is the only weapon available for the attack. But it is difficult to repulse a blow of the bayonet with a *shashka*, and therefore during bayonet charges the officer is poorly defended, if he has not had time to grasp a rifle.

SUPPLY OF THE TROOPS.

As far as we could judge personally, and according to what we heard from those serving in the active army, the supply of provisions to the troops is well organized. There was never any lack of meat; the cattle were large and fleshy; there was always a great variety and abundance of fruit and vegetables; fresh bread was always served and biscuits were used but rarely; almost exclusively when in position. Hot food was served every day, the field kitchens being of great

advantage. Each company had a wheeled field kitchen where the food was cooked on the march. On this account it was possible to serve hot food at the long halt, after which food was cooked for the bivouac. It is evident that the companies on arrival at the bivouac did not have to wait several hours for their meal, or go to sleep on empty stomachs. There were exceptions, when the condition of the roads did not allow the heavily loaded kitchen to move, but such care was taken to supply the troops with hot food that the kitchens even brought food to the positions at dusk or at day-break, or the men went in squads to get their dinner. It sometimes happened that the kitchens betrayed their whereabouts by noise or sparks, and artillery fire was opened against them. Thereupon the kitchens rushed away at a gallop and the company looked on wistfully at the disappearance of their dinner. More than one of these kitchens bore the marks of bullets.

Preserved food was likewise of great importance. With the unavoidable uniformity of food, they afford excellent variety to the campaign fare. All the preserved food of private Russian factories, as well as of governmental ones, proved of excellent flavor and quality. The officers bought as much as they could at every opportunity; and in positions where it was necessary to limit oneself to biscuits they were priceless. The privates appreciated them greatly, but as a can of preserved food formed the standard allowance they tried to buy them with their own money, although the price was rather high—about 1 ruble (51 cents) per can.

THE PSYCHOLOGICAL PHASE OF THE COMBAT.

Taking into consideration the most important phase of the combat, and yet the one that is least possible of direction and evaluation, i. e., *the morale*, we would like to give an idea of the psychological side of the modern *mise en scène* of battle.

Although the laws governing human nature have not altered, and, as before, the fear of death and the instinct of self-preservation speak loud at the sound of the first shot, the *mise en scène* of modern battle is undoubtedly different from the one which was presented even by our last war (Turkish), and gives a new picture of battle.

INVISIBILITY OF THE ENEMY.

The principal characteristic of modern battle fields is the invisibility of the enemy.

When I went into battle for the first time at Yentai I could determine the direction and position of the enemy only by the whistling of the bullets, although I was with my company under shrapnel and fierce rifle fire. When I reached the crest of the hill, I began to scan the horizon to see whence that hail of fire was showered upon us.

I looked in vain for traces of trenches or fortifications and expected to see somebody. I saw nothing and nobody. I was told but one thing before the battle: "Occupy the hill to the right."

Scanning the locality I saw at a distance of $1\frac{1}{2}$ verst (1,750 yards) a long wavy range on which it seemed that there was not a soul and yet it was from that point that the bullets were flying. We determined the approximate range of that hill and opened fire against it.

This invisibility brings about a sense of insecurity and irresolution. It often happened that a man passed several days on a position and was put *hors de combat* without having seen the enemy.

LONG RANGE OF EFFECTIVE FIRE.

Another peculiarity lies in the long distance at which the shots tell. A unit, separated from the enemy by a range of hills, begins to incur losses at a distance of several versts. Before that unit goes into battle, i. e., opens fire and can at least see the hills from which it is being fired at, it has already become somewhat disorganized materially and morally, and consequently can not go into battle perfectly fresh. It is sometimes necessary to remain for several hours under such preliminary fire, whence arises fatigue, both physical and moral, long before the period of actual combat.

DURATION OF MODERN BATTLES.

The duration of modern battles, sometimes reaching two weeks, imposes a terrible tension on the mind, and acts exhaustively upon the physical condition of the men. A great supply of moral and physical strength is needed to stand for several days uninterruptedly the conditions of life

in positions. The conditions of that life are such that one must fire, drink, eat, sleep, and die without knowing one minute's rest, by day under fire, and by night under the nervous strain of expecting a sudden attack at any moment, in utter darkness, sleepless, not being able to light even a cigarette without drawing a hail of bullets at each flash of the match.

Add to this constant losses in wounded and killed. The base of the hill in a few hours after the occupation of the position is covered with fresh burial mounds and their number grows with every day.

FIRST IMPRESSIONS IN BATTLE.

It is difficult to depict in words the impression made upon an inexperienced man by battle. The first projectile bursting alongside or the first bullet hurtling past awakens such varied feelings and impressions.

It is of the greatest importance to take oneself well in hand during the first moments of the fight. A great support is found in the consciousness of thousands of soldiers' eyes studying one's first steps, and that the authorities likewise examine the "new man." The soldiers look especially intently at the new commander and form their judgment of him on the spot (a very critical judgment). On the other hand, the newness of one's impressions helps to drown the inner voice apprising one of surrounding danger.

Modern rifle fire produces a strong impression; the air seems to be literally filled with bullets; their plaintive whistling pervades the atmosphere like a continuous moan, above, below, and everywhere.

As soon as the first shot is heard, the soldiers grow serious, take off their caps and cross themselves, all jokes and conversation ceases. At the given order all march bravely as during maneuvers.

The courage and calmness with which the soldiers go into battle produce a strong impression.

The infantry soon grows accustomed to rifle fire, but the artillery fire, especially the shells, produce a decided impression. It seems to me that this is not due so much to the losses inflicted by artillery as to the earsplitting noise produced by the explosion of the projectiles. The effect is

produced only on the ear, but it is strong. The shimose shells have a specially powerful effect upon the inexperienced, and the shrapnel upon those unaccustomed to battle. The young soldiers throw themselves face downward at each bursting of a shell. Thus the infantry, which suffers most from rifle fire, pays least attention to it; the artillerymen on the contrary are much impressed by rifle fire. This may be explained by the fact that the men are accustomed to their own arm. In addition to this, the whistling of the bullets also produces an impression upon a battery, because it notifies the artillerymen of the approach of the enemy and consequently of danger.

THE CONDUCT OF SOLDIERS IN BATTLE.

As a general rule our soldier in battle has an astoundingly simple and everyday demeanor. He who expects to see something out of the ordinary, something heroic on his face at these decisive moments, something picturesque and dramatic, is greatly mistaken. The soldier remains the same ordinary man as before, only his face is somewhat paler and its expression more concentrated and serious. His nervous and rapid firing betrays the inner struggle. It is at that moment that it is necessary to master the soldier's impressions and bring him to a normal condition, as far as this may be done in battle.

IMPORTANCE OF THE OFFICER IN MODERN BATTLE.

From the moment that the first shot is fired, the center of gravity of the unit rests upon the commander—the officer, and here is shown all the importance of the officer and all the enormous responsibility resting upon him.

THE BATTLE OF COMPANY COMMANDERS.

The worse the conditions of the fight, the fiercer the combat, the greater the losses, fatigue, tension, the strain upon nerves—the greater grows the importance of the officer and the result obtained by 150 to 200 men in battle depends upon the company commander. The present war may be called the war of company commanders. Each eyewitness of battle may confirm how continuously, how narrowly, the men watch their officer. These scores of lives depend upon his activity, his energy, and his personal courage. The soldiers

judge by their officer the condition of affairs, the greater or lesser danger, the success or failure. The authority of the officer may ascend to a great height, but it may likewise fall to rise no more. It is worst of all to show uncertainty and symptoms of fear. Such a commander loses control over his unit and it is impossible to guarantee that it will go bravely into battle.

The officer in battle must more than ever be a commander, and the discipline must be an iron one. Never does the importance of discipline tell so much as in combat. Woe to the unit which in time of peace did not become impregnated with the spirit of iron discipline. It will pay dearly for it in war.

We had occasion to notice how a resolute, imperious commanding shout acted in a marvelous, quieting way upon the men. It is very useful likewise to make remarks concerning the service alone. For example: "Why are the sights not set in that squad? Squad commander, what are you thinking about? Examine and correct immediately." If the commander is angry, reproves for neglect; this means that there is nothing unusual—that everything is going as it ought and that there is no cause for fear. The men grow calmer and forget that bullets are whistling around them, but endeavor to set the sights correctly, to take a better position for firing, and begin to aim.

During the rear-guard actions, after the Liaoyang retreat on August 22 and 23, the men, who had already suffered great losses, were exceedingly nervous, lying at night in position and awaiting the attack of the Japanese. It was the dead of night; the company was on the extreme flank, and the *mise en scène* within view of Liaoyang in flames was somber and depressing. The men opened fire from time to time, without command, a fierce and unreasoning fire, which only helped to strain still more their already unstrung nerves. These are the moments in which it is necessary to bring the men to their senses by a joke or a threat, forcing them to grow calm. But the threat must be serious and the men must feel that it will be executed if need be. Angry words and shouts can do nothing.

It must be owned that such a condition of mind among the soldiers is very rare. As a general thing, the calmness and nerves of the soldier are worthy of envy.

A FEW WORDS ABOUT OUR SOLDIER.

In describing the characteristics of the Russian soldier it is impossible to pass without remark the unswerving obedience with which he executes the most dangerous orders—such as secret, outpost, and sentinel duty. If the officer enjoys confidence and authority, if he takes good care that the soldier be fed well and on time, if he is interested in his personal needs, he may be sure that the company will not leave him in battle, will not go back upon him, but will go forward unanimously. As a general rule the soldier is rather hopeful. If he is well fed and has rested, his spirits are good.

The soldier in position will go to sleep at the first opportunity. It was a frequent occurrence during intervals of combat to hear the riflemen snore. The men sleep as soundly under the fiercest cannonade as if they were in their own houses.

During intervals of firing, and if the men are not fatigued, a lively talk is going on in the positions. The soldiers love to watch an artillery duel.

If our projectiles tell, satisfied, laudatory shouts are heard; if the Japanese hit the mark, the hardest epithets are hurled at them.

If there is the slightest possibility for doing so, the sharpshooter will boil water and make tea in his kettle. Our infantrymen have an abnormal liking for tea, and they find means of preparing it, even under fire, somewhere in rear of a rock or in a hole, and they always very amiably offer some to the officers, who must never refuse, for it hurts them. Moreover, no one and nowhere does a Russian refuse tea.

A soldier knows always how to take care of himself in difficult times. He can find fuel and bedding in a trice, and, if necessary, food. An officer, as far as these comforts are concerned, can never get lost with a soldier.

At the same time, the carelessness of our soldier is wonderful. He has to be looked after like a child. This was especially hard in the positions during the night. If the soldier did not fire, he slept. And it is not always safe to sleep at a distance of 300 to 400 paces from the enemy.

At any rate the soldier thinks that the company commander has to watch for him and that he does not need to bother.

In spite of warnings, of explanations why raw, dirty water should not be touched for drinking purposes or the unwholesome Chinese fruit and vegetables should not be eaten, in spite of dysentery, the soldier will drink out of a dirty pond and eat the vegetables and fruit. He will drink on the march the entire contents of his canteen from the beginning and then suffer from thirst. It is necessary to watch closely over the inviolable supply of provisions, for the soldier might, out of sheer ennui, eat it up after a good dinner. In short, he must be watched continually.

DIFFERENCE BETWEEN THE RANK AND FILE ON ACTIVE SERVICE AND THE OLD RESERVISTS. .

It is impossible not to mark the great difference existing between the soldiers on active service, the young reservists, and men of the *opolchenie* (Landwehr) and the old reservists,

As good as is the first category as regards cheerfulness, endurance, unpretentiousness, and personal bravery, so is the second poor, presenting only negative qualities.

As soon as the old reservists come to the troop unit they begin to complain, and their pretensions are numberless.

Their complaints bear the character of ill-concealed dissatisfaction, almost irritation. As a general rule, these uncouth, heavy bearded men look discontented, are clumsy, slothful, and cowardly. Their propensities are anything but warlike; they like to sleep well, eat their fill, raise a fuss behind one's back, while in battle they are too quiet. In addition to this, forgetfulness of military service, their years, thoughts about their family—all these causes and aspirations are not those which inspire a man at the critical moment and prompt him to throw himself against the enemy's bayonets. On this account the old reservists are not the element necessary for the attack, reconnaissance, or patrol service, where élan and presence of mind are needed. They may be utilized, at best, for defensive action in positions. In course of time, having been in several battles, the reservists improve markedly, but this is not attained at once and rapidly, and until this is reached they are of but little use.

INFLUENCE OF FREQUENT CHANGES IN THE PERSONNEL OF OFFICERS AND MEN.

Frequent changes in the personnel of officers and men can not but influence the moral element of troops.

Thus, on September 29, at the attack of the Tumentzuling Pass by the Thirty-fourth Rifles Regiment, there remained only 2 officers in the ranks, and after Chentanpu, 4 of the new personnel; at Liaoyang about 40 per cent of the rank and file were put *hors de combat*, and at Chentanpu 75 per cent, and the regiment melted to 5 companies.

On account of such enormous losses, the newly appointed officers and newly arrived rank and file know each other but little or not at all. As soon as the company commander, taking advantage of an interval in military operations, has had time to learn to know his men, and these have grown accustomed to his requirements, the first battle changes everything as in a kaleidoscope. The inevitable consequence of all this is the breaking of the close organic unity of even parts of the company. This is why it is necessary, according to my opinion, to have a greater cadre in time of peace, in order that, notwithstanding the losses suffered, there should remain in the unit a sufficient number of old soldiers of the regiment to weld the newly arrived men into a solid body.

SPIRIT OF THE TROOPS AFTER LIAOYANG.

Notwithstanding various unfavorable conditions of actual war, it is impossible not to wonder at the marvelous *esprit* reigning among the troops after the retreat from Liaoyang. There was not even a shadow of the impression which ought to pervade a "defeated" army.

The retreat was made calmly, without haste and anxiety. When crossing the Liao River, the infantrymen began such a romping, pushing each other into the water, and splashing, that it was difficult to believe that the regiment was under fire the day before and lost during the preceding days about half of its contingent.

In bivouac the singers assembled, not by order of the officers, but by their own initiative. The regiment lived its ordinary everyday life, taking advantage of the interval between fighting to rest and recuperate. I can not pass on

ACTUAL EXPERIENCES IN WAR.

without mentioning the especially lofty spirit of the Siberian regiments. The Siberians present a splendid warlike personnel, and earned an excellent reputation in the Far East. They have well deserved the name of "Siberian Guards."

THE INFLUENCE OF CONTINUOUS RETREAT.

There was something which invisibly but surely entered into the consciousness of the soldier and hovered like a shadow of darkness above the army, and this was the influence of continuous retreat after fierce fighting, in which long and success was so near. But the mirage of victory again slipped out of reach of those who fought so indefatigably and nately, and again the hated command to retreat was heard. The knowledge that the fight would end in a retreat in a demoralizing way. I often heard the men ask each other in positions: "When is the order for retreat to come?" This was asked without any *arrière pensée* and only from a consciousness that this had been done and was going to take place again.

Unfortunately it always happened so. The opinion of impending retreat pervading the successful operations, ending in the taking of difficult positions and points, were followed by the order to retreat helped to instill into the minds of the soldiers the "No matter, the order for retreat will be given."

The order to advance, issued on September 22, reinforced the greatest enthusiasm. All were lively and excited. At last the everlasting retreat had ended and the advancing had come. None of the men were anxious thought that the advance would bring about a fierce battle. They marched bravely and surely. The consequences, unfortunately, did not justify this confidence. They strengthen this élan.

DIFFERENCE BETWEEN THE RUSSIAN AND THE SOLDIER.

Generally speaking, it is impossible not to wonder at the stolidity of our soldier, who, notwithstanding a several months and fatal failures, maintained his courage fighting with astounding stubbornness, displaying cheerfulness, true courage, and bravery.

I witnessed how in one of the battles several of the men, after having had their wounds dressed, returned to the position of the company, refusing to go to the dressing station. I saw soldiers in the hospitals asking to be sent back to the colors when they had not yet entirely recovered from their wounds. One of the sergeants, a Siberian rifleman, while still limping on account of his wound, left the hospital in my presence. Upon my asking him why he would not wait for his entire recovery, he answered: "It is too dull here; I like it better in the company; it is gayer there."

The brilliant qualities of our soldier are best displayed in attack. A company charging with the bayonet may be called justly an invincible force. Our soldier uses his bayonet like a tremendous weapon, neither asking nor giving mercy. Rendering full justice to the Japanese soldier, it must be owned that our man is superior to him in bayonet attack because of the force and the élan of his blow, and will always be the victor. The Japanese differs from the Russian soldier in his fanaticism, hatred of the enemy instilled into him since childhood, adroitness and skill, his fighting with rage, sending a bullet into the back of a foe who has just shown him mercy, biting when taken prisoner. This is why our men do not show mercy in attack. Our men have no hatred of the enemy and not a shadow of fanaticism. The soldier is kind to the prisoner of war and treats him gladly to tea and cigarettes. The Japanese display, not only among the men, but also among the officers, a cruelty which does not exist in the Russians.

Eyewitnesses from among the Siberian officers have told me how Japanese officers shot down our wounded. The Japanese deem all means good to attain their aim, showing no mercy to their men or to ours. Firing against their own troops is evidently not an extreme measure, for it was noticed frequently.

The principal difference between the Japanese officers and men and ours is shown in the means of exciting the troops to battle. The Japanese officer walks in rear of the soldiers and drives them on with revolver and sword, while our officer rushes forward, shouting: "Follow me, brothers; don't give me up!" And the brothers do not give him up.

The Japanese likes ruses—without them he is not sure. Large and small ruses are met with at every step. The

Japanese were greatly assisted by their knowledge of the Russian language, which many of them possess perfectly. A well-trained ear knows how to detect the Japanese pronunciation, because they can not sound the letter *r*. The Japanese, for example, says not "Hurra," but "Houla;" not "papirossa," but "papilossa," like the Chinese. But it is not very distinct with all of them, and, moreover, it is easy to be deceived. Taking advantage of their knowledge of the Russian language, the Japanese used it successfully when the troops had not yet grown accustomed to their subterfuges. Thus, they often challenged the sentinels in Russian, asked for the commander of posts, listened to conversations, dressed like Chinamen; in battle—in the dark—they gave orders in Russian. Thus, during the attack of the Tumentzuling Pass, when our company occupied the second trench and rushed forward with the bayonet, we heard distinctly from the trench: "Brothers, these are your men." The company stopped involuntarily, but the senior noncommissioned officer, following closely upon the company commander cried: "Don't believe them, brothers, they are Japanese; the ruffians!" and rushed on like a hawk. But this moment of procrastination cost the company two wounded officers and about ten men. The Japanese succeeded in discharging their rifles at close range. From the other trench the Japanese shouted: "Tenth company, to the rescue!" Farther on the Japanese cried: "Don't fire at your own men!" But for an answer they received a few volleys. The Siberian troops can distinguish them quite promptly, but the troops unaccustomed to their subterfuges do not.

I can not pass unnoticed the use of strong drink in the Japanese army as an incentive before battle.

Eyewitnesses, both officers and men, told me more than once that they found *hanshin* in the canteens of the prisoners of war and that Japanese soldiers were frequently taken prisoner in an intoxicated condition. The stupefying influence of *hanshin* is well known. Its effect is strong and of long duration, and it is not difficult to obtain that beverage, for there is not a *fanza* without it. There are likewise *hanshin* factories.

Such are, along broad lines, the characteristic features of the men of the two opponents. A great difference exists between them psychologically—one of them is deeply imbued with Christian ideas, while the other is purely pagan.

RELATIONS OF THE SOLDIERS TO THE EVENTS OF THE
PRESENT WAR.

The sketch of the moral picture of our soldier would not be complete if we did not mention his relation to the events of the present war. The man who thinks that the soldier is ignorant of the conditions at the theater of war and that he does not rise above the affairs of his own company, knows nothing about the soldier. But in order to learn what he thinks about the events of the war and how he understands them, it is necessary to hear the soldiers' quiet talk among themselves on outpost duty, on the positions, or in bivouac; it may still better be observed in the hospital among the sick—there the soldier is more frank and open.

The reading of papers always elicits silent, concentrated attention, and even foreign news is perused. The papers are begged from the officers and are read as long as there remains a scrap of them.

The relations of foreign countries toward us are very correctly understood. They likewise fully comprehend our situation in the theater of war.

A very sane understanding of the situation was noticed in general.

I must say, in conclusion, that our soldier is excellent material because of his rare stolidity under circumstances against which scarcely any European army could have coped, by reason of his indomitable courage, endurance, unpretentiousness, and cheerfulness. Not only after Liaoyang, where victory was in our hands, but even after the February combats at Mukden, according to the words of those who have returned from those fights, there was neither despondency nor low-spiritedness in the army, not even a shadow of humiliation and loss of confidence in success, which it was so depressing to note in Russia.

When one leaves the confines of Manchuria and enters into Russia, the farther one goes the greater the anxiety and the more senseless the rumors, the more fantastic the so-called "facts," the more depressed and somber the attitude; and after having crossed the Ural, it is noticeable that the *De Profundis* has long ago been sung over our army of the Far East.

It is astounding that men who fight and die have kept intact their faith in Russia and in themselves, while those thousands of yersts away have fallen into a state of incurable depression.

This condition of mind is, of course, brought about by the papers and letters sent to the army from home. Instead of supporting and encouraging those who sacrifice everything far from their mother country, everything that is dearest in life—and even life itself—and of sympathizing with them, nothing but reproaches, tardy complaints, accusations, and attacks are showered upon them.

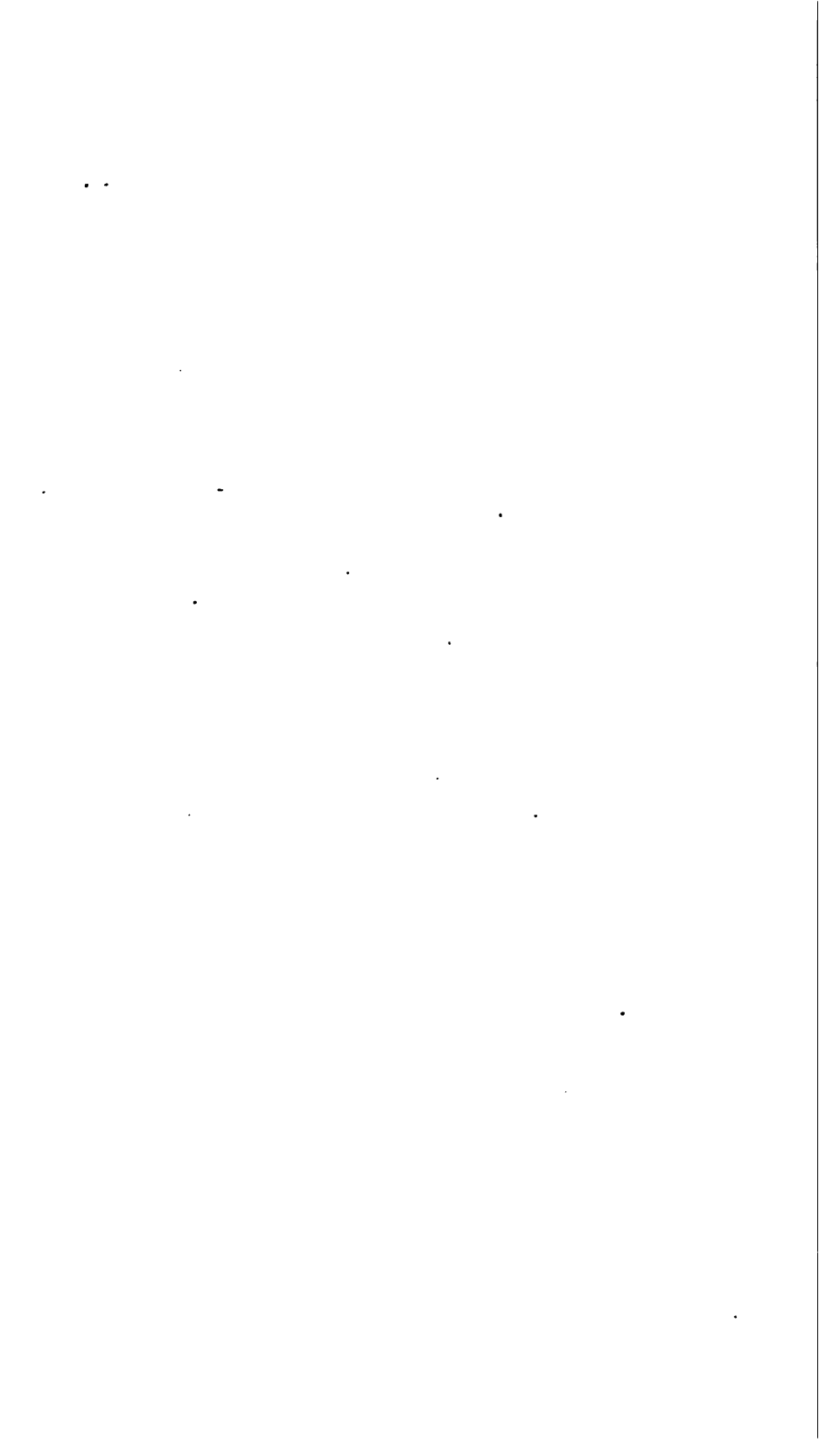
Such relations render the difficult situation of the army still worse, and nevertheless victory is demanded of it. But each and every one who was in the active army, as an immediate participant in the fights and in life at the front, is filled with the deep conviction that, notwithstanding its terrible failures, our army is a powerful force which can and will lead Russia on its former path of victory and glory!











WAR DEPARTMENT . . OFFICE OF THE CHIEF OF STAFF
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GENERAL STAFF

Series No. 10

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Translated for the General Staff, U. S. Army
By First Lieut. FRANCIS J. BEHR
Coast Artillery Corps

JUNE 30, 1907



WASHINGTON
GOVERNMENT PRINTING OFFICE
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WAR DEPARTMENT
Document No. 299
OFFICE OF THE CHIEF OF STAFF

PREFACE.

"Drill Regulations for The Infantry, German Army, May 29, 1907," translated from the German by Lieut. Francis J. Behr, Artillery Corps, U. S. Army, is published by consent of the German Government. The high state of efficiency of the infantry of the German army is recognized and the information contained in its regulations should prove of value to officers of the Army and National Guard, to whom copies of the translation will be distributed.

WILLIAM P. DUVALL,
Brigadier-General, Acting Chief of Staff.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF STAFF,
Washington, May 18, 1907.



INFANTRY DRILL REGULATIONS

MAY 29, 1906.

[Berlin, 1906. Ernst Siegfried Mittler & Son, Publishers to His Majesty, Kochstrasse 68-71.]

I approve the following drill regulations for the infantry in the expectation that, while fully maintaining our old traditions of order and discipline, war training for which the new regulations afford further scope will be constantly promoted.

It is prohibited to make any additions to the regulations, oral or written, for the attainment of greater regularity or other purposes. The scope permitted in the application of the regulations and in training must not suffer any limitation.

I empower the war department, however, to make necessary changes in so far as they are not of a fundamental nature.

DEBERITZ, *May 29, 1906.*

WILLIAM.

To the WAR DEPARTMENT.

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INTRODUCTION.

1. The regulations furnish rules for instruction and consider matters relating to the infantry combat. Since, however, this principal arm almost always fights in combination with the other arms, their conduct is taken into account in so far as it is important for the infantry combat.

2. War demands stern discipline and the exertion of every effort. Especially does the combat require leaders trained to reflection and to self-reliance, and soldiers of initiative, who, from devotion to their Emperor and the Fatherland, manifest a firm purpose to conquer even when their leaders have fallen.

3. In war only simple methods can secure results. It is important, therefore, to learn and apply simple formations, which must be practiced until complete facility is attained. All unpractical work is prohibited. Parade exercises are added, which, on account of their great value for purposes of discipline, must be executed with the utmost exactitude.

4. Each commander of troops, from the company commander upward, is responsible for the development, according to regulations, of those placed under his charge, and is to be allowed freedom in the choice of the means. Superiors should interfere as soon as they notice errors and lack of progress.

5. The school drills end with the company. In exercises involving the battalion and higher units, cooperation of the individual units for the common battle purpose must be acquired.

6. Continued drill of the same kind tires both body and mind. In the exercises, therefore, variations are introduced. Their duration and kind must also be gradually adapted to the powers of the men, since otherwise the unavoidable relaxation on account of overexertion is detrimental to military discipline.

7. The more often the ground used is changed in exercises, the greater is the gain for the troops. For this reason every opportunity and every season of the year must be taken advantage of.

8. Exercises by units at war strength are of particular value. Even within the company they are useful, serving to develop platoon leaders and numerous squad leaders, one or two platoons being at war strength, the rest skeletonized—merely the full number of platoon and squad leaders being retained. From the battalion upward, especially in large units, exercises are recommended as occasion offers, in which the marching depth [marschtiefe, distance between units on a march] of troops at war strength can be attained by increasing the distance between companies.

9. In peace maneuvers, unless exceptional losses are ordered, more men are added to the firing line through reenforcement than can find room for the free use of the rifle. The men in excess follow immediately behind the firing line. They do not fire, but conform to each movement of the firing line.

10. The commands (printed in heavy type) are divided generally into preparatory commands and commands of execution. The former are somewhat prolonged, the latter short. The pauses are indicated in the text by means of leaders (.....). Indifferently given commands lead to careless execution. The commands are to be given in a sharp tone, but not louder than the purpose requires.

11. In addition to commands and orders, calls and signals are used.

The whistle may be used to fix the attention before an order is given.

To **advance** the leader raises the arm.

To **indicate the direction**, the leader designates with the raised arm the direction of march.

To **halt**, the raised arm is lowered.

To **deploy**, both arms extended are raised laterally to the height of the shoulders; when necessary one of the arms is then pointed in the direction the skirmishers are to move.

To **assemble**, a circle is described above the head with the arm.

These signals may also be given with the weapon. Additional signals require mutual understanding in each individual case.

If a signal is given to a unit in close order, it is repeated by its leader.

12. At great distances time and energy are economized in the transmission of orders and reports by means of signal flags. In the zone of effective fire regular signaling is but seldom possible. During a battle rapid communication may be had by signals made by wigwagging (arms, hats, etc.). The following signals, which can all be given in a lying position, are commonly to be used:

a a a—"Advance."

g g g—Given from the advanced firing line to the rear:
"Advance our own artillery fire."

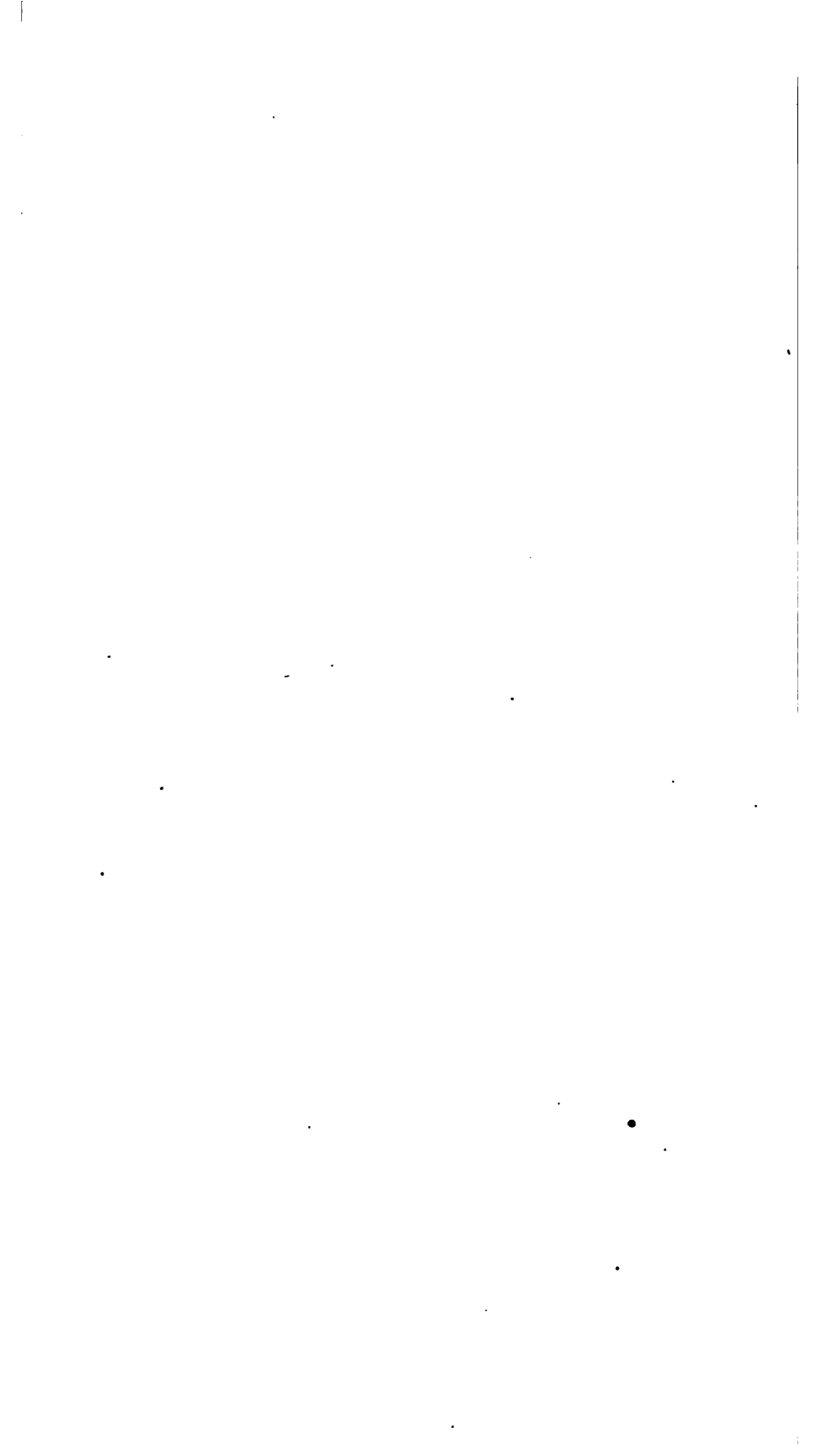
h h h—"Halt."

m m m—Given from the advanced firing line to the rear:
"Ammunition needed." Given from the rear to the front: "Ammunition coming."

s s s—Given from the advanced firing line to the rear:
"We wish to begin the attack." Given from rear to the front: "The attack is about to begin."

If the signal is understood, V (verstanden=understood) is sent back.

Further signals require mutual agreement in each individual case.



Part I.—THE SCHOOL.

1. THE COMPANY.

A. CLOSE ORDER.

a. SCHOOL OF THE SOLDIER.

In general.

13. Careful, rigid, individual training is the basis of all military education.

It is only by the thorough training of the individual that the necessary cooperation of the many can be attained.

Erroneous or incomplete training of the recruit impairs his effectiveness during his whole time of service. Errors which creep in during the first instruction can seldom be eradicated because of their detrimental consequences. Likewise it is impossible to compensate for lack of individual training by means of combined exercises.

14. In fencing exercises one should seek suppleness, address, and a good position rather than quickness and exactness.

Instruction without arms.

POSITION.

15. **Attention.** The man observes silence. He stands in place, with his heels as near each other as his conformation permits. The toes are turned out equally, the feet forming nearly a right angle. The weight of the body rests equally on the heels and balls of the feet.

The knees are straight without stiffness.

The upper part of the body is upright, the chest thrown out moderately; the shoulders are at the same height and slightly thrown back, but not raised.

The arms hang without constraint; the elbows are slightly bent and carried somewhat forward.

The hands touch the thigh with the palms and points of the fingers. The fingers are joined and bent naturally, the little finger touching the seam of the trousers.

The neck is held free and without restraint.

The head is erect, the chin slightly drawn in, and the eyes directed straight to the front.

16. Should a preparatory command be given without **ATTENTION** having preceded it, the man will observe silence of his own accord.

17. **At ease.** The left foot is advanced. The man is permitted to move, but is not allowed to speak without permission.

MARCHING.

18. The march is divided into the drill march, the march in cadence (march at attention), and the march without cadence (route step).

19. The drill march furthers discipline and control of the troops. It is used at regular closed formations, when rendering honors and at parades.

Detachment.....MARCH.^a The left leg is slightly bent, the toes depressed and pointing slightly outward, and the lower part of the leg so extended as to form a straight line with the thigh. At the same time the weight of the body is thrown forward. The foot is planted lightly and flat on the ground at a distance of about 80 centimeters from the right foot. The whole weight of the body now rests on the left foot.

While the left foot is being planted the right heel leaves the ground. The right leg is advanced, the knee slightly bent, the toes being near the ground but not touching it. The leg is straightened. The foot is then planted in the same manner as the left.

In this manner the man continues the march. He moves straight forward in a line perpendicular to his shoulders. The

^a (Abteilung) This preparatory command is used for each detachment below that of a company, and for individuals.

If only a part of a larger unit is to execute a movement, it is to be designated particularly, e. g., **Second Platoon.....March.** (For the company, battalion, etc., the preparatory command is **Company ———, Battalion ———, etc.)**

arms swing without constraint. The cadence of the march is 114 steps per minute.

20. For parade purposes: **Mark time, Detachment**
March (during the march: **Mark time**). The man alternately raises and plants each foot on line with the other, without raising the knee or lower leg too high or stamping on the ground. The cadence is maintained. **Forward**
March. The command of execution is given as the left foot touches the ground. The man takes another step with the right foot in position and then steps off with the left foot to the usual distance.

21. To change from the drill march to the march in cadence, the command **At ease** is given.

The rigidity of the drill march, viz, the pressing back of the knees, is relaxed, but good carriage, length of pace, and cadence are still maintained.

At **Attention**, the drill march is resumed.

22. **Route step**
March (if at the drill march or march in cadence, **Route step**). The character of the ground and the build of the individual determine the length of the step and the cadence. The march must not be retarded, and good carriage is to be preserved. To change from route step to the march in cadence, the command **Take step** is given, and to the drill march, **Take step**
Attention is given.

23. **Detachment**
Halt. Marching in step the command of execution is given as the right foot touches the ground. The march is completed with the left foot and the right brought by the side of the left. During the route step at the command **Halt** the man takes another step and brings the rear foot by the side of the other.

DOUBLE TIME.

24. **Double time**
March, March. At **Double time** the forearms are raised, so that when resting lightly against the body they form nearly a right angle with the upper arms which hang naturally. The hands are lightly closed, thumbs uppermost and nails toward the body.

At the second **March** the double time is taken up naturally, beginning with the left foot. The feet are placed flat on the

ground, the knees being slightly bent. The arms are moved slightly backward and forward near the body. The length of the step is from 75 to 90 centimeters, according to the nature of the ground; the cadence is 170 to 180 steps per minute.

If marching at route step the command **Take step** (attention) is to be given immediately before the command **Double time**.

At **Detachment** **Halt**, the man comes to the halt after the third step.

At **Quick time** **March**, the march in cadence is resumed after the third step.

25. March, March. The man runs as fast as he can, at the same time retaining his alignment.

The change to a halt or quick time takes place without further command as soon as the designated position is reached, or at **Squad** **Halt**, or **Quick time** **March**. In the last case the route step is to be taken up.

FACINGS AND MARCHING BY THE FLANK.

BEING AT A HALT.

26. Right (left) Face. Pressure is exerted on the ball of the right foot while the right heel is somewhat raised, and the body is turned about 90 degrees to the right. The left heel, upon which the weight of the body rests, turns in position, the left toe being somewhat raised. The right foot leaves the ground and after the facing is completed is placed smartly by the side of the left. Hips and shoulders take the new direction at the same time as the feet.

27. Detachment About face. The facing is executed by a turn of 180 degrees to the left on the heel of the left and ball of the right foot. When the turning is completed the right foot is placed smartly by the side of the left.

BEING IN MARCH.

28. By the right (left) flank March or Right oblique (left oblique) March. The command of execution is given as the right (left) foot strikes the ground. The man executes the turning on the ball of the left (right) foot toward the designated side with the following step and continues the march in the new direction.

29. Detachment to the rear March. Marching in step the command of execution is given as the right foot strikes the ground.

The turning about to the left is executed on the ball of the left foot and the right foot is placed by the side of the left.

Instruction with arms.

POSITION.

30. Position at "the order." The piece is vertical, the sling to the front, the butt close to the right foot, the heel of the butt being on line with the toes. The right arm is extended and both elbows are at the same height. The right hand grasps the piece, thumb in rear of the barrel or hand guard (depending on the size of the man), the other fingers being bent naturally but joined, index and middle fingers resting upon the gun sling.

31. Kneel. The man places the left foot about a pace in front of the right, at the same time turning on the ball of the right foot and kneels on the right knee. The piece is carried vertically forward to the right of the right knee and held with the right hand at the hand guard. The left hand is placed on the left knee.

Rise. The man quickly rises, pressing the left hand against the knee in so doing, and places the right foot beside the left. The piece is replaced near the right toe.

32. Lie down. The man first kneels, at the same time grasping the piece with the left hand at the balance, muzzle somewhat elevated, and inclines the upper part of the body forward. He then extends his right hand flat toward the front and lies forward flat upon the ground, the left knee being somewhat drawn in. To accomplish this first the left knee, then the right hand, and finally the left elbow are used as points of support for the body. All motions follow each other rapidly.

The piece is placed on the left forearm, where it rests between the upper and lower rings, barrel to the left, the right hand grasping the hand guard.

Rise. The man places the piece in the left hand, muzzle somewhat raised, supports himself on the right hand, and at

the same time draws the right leg as near to his body as possible without raising thereby the upper part of the body from the ground. He then raises himself quickly by means of the right hand, places the left foot forward and brings the right by the side of the left. At the same time the right hand grasps the piece and replaces it near the right toe.

33. If the man is in the front rank he must take a long step forward before lying down, and if in the rear rank, a like step after rising.

34. After taking the position *kneeling* and *lying down*, the man is permitted to move only at command.

MANUAL OF ARMS.

35. In the manual of arms the arms and hands only are allowed to move, the rest of the body remains in an erect and fixed position. Handling the piece so as to make the execution of the manual audible and striking the butt on the ground are prohibited.

The individual motions of which each movement in the manual consist are executed in a quick and precise, yet easy manner, one following the other without undue haste. The piece is never grasped by both hands simultaneously; on the contrary, the movements of the hands are consecutive.

36. **Shoulder. . . . Arms.** The right hand raises the piece and brings it vertically, barrel to the right, in front of the center of the body, lower band at the height of the collar. The left hand grasps the piece immediately below the right. The right hand grasps the magazine about two finger breadths above the bolt handle. The thumb lies extended along the stock.

While the right hand raises the piece, barrel turned to the front, as far as necessary to bring it to the left shoulder, the left hand grasps the butt in such a manner that the heel lies between the thumb and index finger, and the palm as well as the ends of the fingers are pressed against the flat part of the butt. The piece lies parallel with the row of buttons, the ball of the bolt about the height of the second button of the blouse, the butt immediately in front of the left cartridge box. The left forearm rests lightly against the cartridge box. The right arm resumes its position at the side.

37. Order Arms. The left hand carries the butt toward the left thigh, turning it slightly toward the body, the right hand grasps the piece at the height of the shoulders, the elbow pressed slightly downward.

The right hand carries the piece in a vertical position across the body, turns it slightly outward, and permits the piece to slide through the hand if the height of the man requires it. The thumb lies behind the barrel or hand guard. The left arm resumes its position at the side. The butt is placed near the right toe.

38. Present Arms. The left hand carries the piece in front of the left half of the body, turning it slightly to the right, so that the man can still, with the left eye, look straight ahead on the right side of the piece. The right hand grasps the small of the stock at the same time, the thumb toward the body. The left hand grasps the piece so that the end of the thumb, which lies extended along the rear sight, coincides with the front end of the sight, and together with the right hand turns the barrel toward the body; the fingers of the right hand are placed extended immediately below the guard on the small of the stock, thumb below the lock. The piece is thus lowered so that the lower band is at the height of the collar, the stock touching the right forward edge of the left cartridge box. The left forearm forms almost a right angle with the upper arm.

39. For rendering honors the command, Attention, Present Arms is given. The inspecting officer must be looked at; when necessary, the command **Eyes Right** (eyes left) must be added. The man follows the inspecting officer with his eyes, turning his head for the purpose, until the inspector is opposite the third man from him, when he turns his head straight to the front.

40. Shoulder Arms. The left hand turns the piece so the barrel is toward the right, the right hand grasps the magazine about two finger breadths above the ball of the bolt in such a manner that the thumb lies extended along the stock, and raises the piece as far as necessary to bring it to the left shoulder. Further procedure according to paragraph 36.

41. Grounding the piece. Sentries standing at the order with bayonets fixed salute by "grounding the piece" instead of by the "present."

The right hand grasps the handle of the bayonet and muzzle of the piece beneath the front sight, so that the ring and little fingers lie beneath the knob of the bayonet handle. The piece is raised slightly, carried to the right to the full extent of the right arm, and then lowered vertically. After rendering the honor, the man resumes his position at "the order" in the inverse order.

FIXING AND UNFIXING BAYONETS.

42. The fixing of the bayonet can be executed from all positions of the piece and during movements; it is executed while "at ease" only on command or signal. After the fixing of the bayonet, the piece is returned to its former position.

In order to save wear on the piece, the fixing of the bayonet is omitted while drilling. It suffices to instruct the man individually. But on each occasion when the fixing of the bayonet would actually take place it must be ordered either by command or signal, and the soldier must go through the motions.

43. Fix Bayonet. If the man is standing at "the order" or is kneeling, he draws the bayonet with the left hand, back toward the body, from the scabbard, and fixes it in its support, during which the muzzle of the piece is inclined about two hand breadths to the front. The bayonet is pressed down until the click is heard as the catch enters its recess, and the spring is fully seated.

To execute fix bayonet while marching at "shoulder arms," the piece is carried as at "to the charge right," paragraph 65.

When lying down the bayonet is fixed in the manner most convenient to the individual.

44. Unfix Bayonet. The execution takes place "at ease" and usually at "the order." The right hand grasps the piece at the height of the upper band, inclines it about two handbreadths toward the front, and presses back the catch with the thumb. The left hand raises the bayonet and places it in the scabbard, the man looking toward it while so doing.

LOADING, FIRING, UNLOADING.

45. Loading must be frequently and thoroughly practiced in order that each man may be able to load quickly and safely in all positions of the body. When drilling at loading, the piece must be used carefully. Opening and closing the chamber, as well as locking the piece are executed only when using cartridges.

Before beginning loading the cartridge box is opened on command, and closed without additional orders at the end of the exercise.

LOADING.

46. If firing is to take place immediately after loading, the command **For Firing** **Load**, will be given.

The man standing at "the order," at the command **Load** makes a half face to the right by turning on the ball of the left foot and places the right foot half a pace to the right. The hips and shoulders turn at the same time as the feet. The knees are slightly bent, the weight of the body resting equally on the balls and heels of both feet.

While turning, the right hand brings the piece to the front, muzzle at the height of the eye. The butt rests lightly on the right cartridge box and even with its rear edge. The left hand grasps the piece near the balance, the left thumb extending along the stock. The man inclines his head toward the breech, thumb and index finger grasping the bolt handle, so that the second joint of the thumb lies over the handle.

The right hand turns the bolt to the left and with one motion draws it to the rear. The right hand then passes underneath the piece to the cartridge box and with the thumb and index finger brings out a loaded clip. The clip is inclined somewhat toward the rear as it is inserted in the magazine opening. The thumb presses along the clip on the upper cartridge until it is completely beneath the right wall of the magazine.

The right hand again grasps the bolt handle as on opening, thrusts the bolt home, and turns the handle to the right in one motion. The right hand then grasps the small of the stock so that the index finger is within the guard and in front of the trigger. The head is raised and directed straight to the front.

The right arm rests lightly against the outer side of the butt. At the command **Firing**, the rear-rank man steps promptly one pace to the right and front toward the front rank.

47. The man standing at the "shoulder arms" at the command **For Firing** brings the piece down as "to the charge-right" (trail arms) (65), the man in the rear rank does so while moving over. Further procedure at **Load** according to paragraph 46.

48. When kneeling the man in the front rank at the command **For Firing** rests the weight of the body on the right heel, the man in the rear rank moves straight up one-half pace toward his front-rank file. Further procedure at **Load** according to paragraph 46.

FIRING.

49. At Cavalry straight ahead: At 900 [meters]: Aim.....
Fire: Load.

The instruction of the soldier in musketry, e. g., manipulation of the sight, position and aiming, delivery of fire, etc., is laid down in the Firing Regulations (Schiess Vooschrift). At "at 900 meters," the man inclines his head toward the sight. The left hand, while carrying the piece back and somewhat toward the face, sets the sight at the designated mark with the thumb and middle finger and then brings the piece back to its former position, the man at the same time raising his head.

The pause between **Aim** and **Fire** is longer when aiming in the kneeling position and at long ranges than while aiming in the standing position and at short ranges. The command **Fire** is somewhat prolonged.

Load. The piece is brought from the aiming position to that designated in paragraph 46. When cartridges are still in the magazine the man loads by drawing back the bolt and pushing it home again; when the magazine is empty, loading is executed according to paragraph 46.

50. At Cavalry left oblique: At 700 [meters]: Fire at will:
Cease firing: Load.

At **At Cavalry left oblique**, the man faces in the direction of the designated object, the rear rank man at the same time moving forward a little to the opposite side. At **Fire at will**

the man fires and loads of his own accord, according to paragraph 193.

Cease firing. Firing is immediately suspended, every movement of loading ceases, and any man in the aiming position brings his piece down.

Load. Each motion of loading which was interrupted by the command **Cease firing** is completed, and the man holds himself ready for firing.

51. While in the kneeling position the front rank man fires with a support (elbow resting on knee and weight of body on heel), the rear rank man offhand (without support).

RECOVER ARMS; LOCKING THE PIECE; COMING TO THE ORDER.

52. If the man in the position of aim is to take the position of load, the command **Recover Arms** is given.

At **Recover** the left eye is opened and the index finger straightened. At **Arms** the head resumes the erect position and the piece is brought to the position as prescribed in paragraph 46.

53. **Lock Pieces.** At the command **Lock** the man inclines the head toward the breech. At ranges of 500 meters and upward the slide of the sight is run down with the thumb and middle finger of the left hand. The right hand is carried to the safety lock, grasping it below with the first joint of the thumb and above with the middle joint of the index finger.

At **Piece** the safety lock is turned to the right, and the erect position of the head resumed.

54. **Order Arms.** While the man resumes his position by one movement on the left heel, the left hand brings the piece toward the right shoulder. The right hand grasps the piece above the left and places it near the toe of the right foot. The left hand is carried to the side.

The man in the rear rank at the command **Order Arms** first takes position while coming to the order and then steps back to his former position.

55. When kneeling the man at the command **Order Arms** places his piece on the ground according to paragraph 31. At the same time the front rank man rises from his right heel to the upright position while the rear rank man steps back only after he has risen.

LOADING AND LOCKING THE PIECE.

56. If firing is not to be executed immediately after loading, the piece is loaded at will. At **Load and lock** the man, whether standing or kneeling, carries the piece obliquely in front of the breast, muzzle high to the left, and loads and locks the piece as is most convenient to him. The man in the rear rank does not move up or over.

After the piece is locked, it is brought to its former position. Loading and locking the piece are similarly executed while in motion.

57. Loading and locking of the piece while lying down are executed in the extended order only. The man lies somewhat on the left side, supports himself with the left elbow, and brings the piece forward. The right hand passes between the body and the piece to the cartridge box. After loading and locking the piece it is again laid on the left forearm, barrel to the left, as in paragraph 32.

BRINGING THE LOADED AND LOCKED PIECE TO THE READY.

58. For firing Ready. At **Firing** the last parts of paragraphs 46, 47, and 48 are executed. At **Ready** the man brings the piece forward according to paragraph 46, grasps the safety lock with the thumb and index finger of the right hand and turns it to the left. Then the right hand is carried to the small of the stock, index finger in the trigger guard.

UNLOAD.

59. Unload. The execution takes place at will. The piece is brought into the position prescribed in paragraph 56. The man inclines the head toward the opening of the magazine. The left hand is slid back until the thumb lies on the left and the fingers on the right of the opening of the magazine. The unlocked bolt is slowly drawn back, the man taking the cartridge that was in the chamber from the magazine with the right hand. The cartridges in the magazine are unloaded in the same manner, the bolt being pushed completely forward and back each time.

After unloading, the trigger is pulled, the piece locked with the left hand and brought to its former position.

MARCHING AND DOUBLE TIME WITH ARMS.

60. While marching at "shoulder arms," as well as when rendering honors and at the "march past," the left elbow remains fixed, the right arm moves without constraint.

To rest the men while marching in step the command **Right shoulder arms** may be given.

61. **Double time**.....**March, March**. At the command **Double time** the piece is placed on the right shoulder. The right hand grasps the small of the stock, the wrist resting lightly against the cartridge box. The left hand holds the bayonet and intrenching tools, the point of the bayonet pointing downward toward the front. The arms must not be permitted to make a noise. At **Detachment**.....**Halt** or **Quick time** the former position of the piece is resumed.

62. Should the command **March, March** be given while at **Double time**, units in close order, carry the arm as prescribed for the march or for the assault; otherwise the piece is carried at will.

63. To halt and immediately kneel or lie down, the command **Kneel** or **Lie down** is given. The execution takes place according to paragraphs 31 and 32.

64. To accelerate the advance from the kneeling (lying) position the commands **Detachment (route step)**.....**March** or **Double time**.....**March, March** may be given. In the first case the man gets up at the preparatory command and takes the "shoulder arms." In the second case he gets up at **Double time** and brings the piece to the right shoulder while rising.

If the command **March, March** is given when kneeling or lying down, each man carries the piece as is most convenient to him for running.

ATTACK.

65. To the charge, piece.....**Right (trail arms)**. The left hand carries the butt, turning it inward, toward the left thigh. The right hand grasps the piece at the height of the shoulder, brings it to the right side, but slightly above the ground. The muzzle is about two hand breadths in front of the right shoulder. The left hand holds the bayonet scabbard. The man marches at attention, the cadence being in-

creased to 120 steps per minute. The command **March, March** follows soon after the increase of cadence.

66. Charge. . . . Bayonet. The command is executed by the men of the front rank only. Each man brings the piece forward with the right hand so that the small of the stock lies immediately in front of the right cartridge box, and the muzzle in front of the left shoulder and at the height of the eyes. The left hand grasps the piece at the hand guard and the right at the small of the stock.

67. If the command **Detachment. . . . Halt** is given after "trail arms" or "charge bayonets" is executed, the "ready" is resumed.

MANUAL OF THE COLOR.

68. If the manual consists of several motions, they follow one another without undue haste. At the "order arms" the color stands by the side of the right foot, the heel of the pike being on line with the toe.

69. When coming to the "shoulder arms," the color is brought to the right shoulder with the right hand.

In all movements at the route step and on marches the color may be carried on the right or left shoulder, at the will of the color bearer.

When the color is unfurled, it must be carried so that the edge remains at least one-half a hand distant from the shoulder of the color bearer.

70. The color is carried at the "carry" at the march past in regimental columns (regiment in column of companies), at the receiving of the colors until the departure of the color company, and also at the removal of the color from the time "to the color" is sounded, on ceremonial occasions at which the colors are brought to the front.

The pike rests in the socket of the sling, vertically against the right shoulder, the right hand grasping the heel, the left hand grasping the pike at the height of the shoulders.

71. In coming to the "order arms" the color is brought, with the right hand, to the position designated in paragraph 68.

72. When rendering honors, the color is brought to the carry according to paragraph 70, except that it does not rest in the socket of the sling.

The right hand grasps the heel of the pike, both hands bringing the color in front of the center of the body.

The top of the pike is lowered to the front until the cloth almost touches the ground.

The color is again raised and brought against the right shoulder. It is left in this position until the troops resume the "shoulder arms." The right hand then grasps the pike immediately below the left and places the color on the right shoulder.

The left hand is carried to the left side.

MANUAL OF THE SWORD.

73. Officers and noncommissioned officers equipped with officers' side arms usually draw the sword when drilling with detachments under arms if such detachments are as large as platoons, are in close order, and also in all cases when marching at attention through inhabited places.

In battle the sword must, at the latest, be drawn when the troops advance to the charge.

74. At "order arms" the sword, without being turned, is lowered so that the point touches the ground.

The grip is embraced with the whole hand.

At "shoulder arms" the hilt lies against the thigh, the back of the blade at the right shoulder (seam of the sleeve). The thumb is passed through the bow (of the hilt); the sword rests in the palm of the hand, the pommel between the second and third fingers. While marching the right arm moves naturally, the left hand holding the scabbard vertically.

75. Before executing the salute the sword is grasped so that the index and middle fingers lie in front of the hilt, the thumb alongside it, and the rest of the fingers behind the pommel.

In executing the salute, the sword is brought vertically in front of the middle of the breast, but turned flat toward the body, the pommel being at the height of the fifth button on the blouse. The blade is lowered flat to the ground, so that the right arm extended drops alongside the right thigh. The point of the sword remains at a distance of a hand breadth from the ground.

The first movement of the salute is executed quickly at the "present," the next slowly.

The sword is kept lowered until the "shoulder arms" is resumed. Simultaneously with this motion the sword is brought in front of the breast, and with a second movement to the right side.

76. Officers mounted place the hilt of the sword on the right thigh two hand breadths from the hip joint so that the wrist and the third and fourth fingers, which lie closed behind the hilt, rest on the middle of the thigh. The back of the blade rests against the shoulder (seam of the sleeve). edge to the front.

77. Officers mounted in executing the salute bring the sword in front of the middle of the breast and lower it in such a way that the right hand hangs down behind the thigh, the blade vertical, with the edge turned toward the horse, being behind the right spur.

78. Adjutants do not draw the sword. They render honors at "the present" and at the march past by saluting with the right hand.

79. First sergeants, etc., carry the officers' sword, but do not render honors with it.

Noncommissioned officers without officers' side-arms do not draw their own side arms when not carrying a rifle. At the "march past" they steady the side-arms with the left hand.

b. COMPANY.

In general.

80. Exercises in ranks, files, squads, and platoons are preliminary to company drills. The instructions specified for the company are applicable therein.

81. The company must be able to execute all the prescribed movements with certainty and precision, whichever rank is in front, whether the right or left wing leads, and when the squads have been faced about in deploying or turning.

Formation.

82. The formation is in two ranks. Two men, one standing behind the other, are called a file. The two tallest men form the first file on the right flank, the two next tallest the

second file, and so on to the left of the company. Slight deviations are allowable. In case there is an odd number of men, there remains a vacant place in the rear rank on the left of the company (blank file).

The rear rank stands parallel with the front. The distance between ranks is 80 centimeters from the back of the front rank man to the breast of the rear rank man.

In properly formed ranks, each soldier when at the order and without arms touches the man next to him lightly with the elbow.

83. Company in line (Pl. I). The company is divided into squads consisting of four files each, beginning at the right. In case a squad does not contain four files, the number should be increased to four by taking range finders from the line of file closers.

The company is divided into three platoons. In case the number of the squads is not divisible by three, one of the platoons will be larger or smaller than the other two.

Platoons consisting of more than three squads are divided into sections (half platoons). If there be an odd number of squads, the right section will be the larger.

In order to render the division into sections possible for purposes of instruction, a larger number of files can be made during peace exercises by forming blank files in certain squads.

84. Platoons are numbered from the right of the company; sections, squads, and files from the right of the platoons.

85. The company commander assigns posts to the officers. The three seniors take posts as platoon leaders on the right flank of their respective platoons in the front rank, the fourth takes post on the left flank of the company. Additional officers take posts behind the line of file closers, at a distance equal to that between the ranks.

If there are no officers to act as platoon leaders, noncommissioned officers are assigned to act as such.

The company commander goes wherever his presence may be necessary.

86. Each squad contains one squad leader (noncommissioned officer or lance corporal). The leaders of the right and left squads of each platoon are at the same time the platoon guides

KEY TO PLATES I AND II.













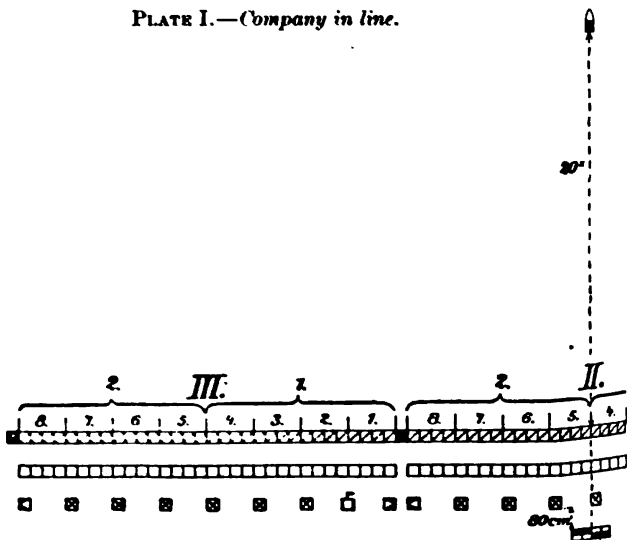
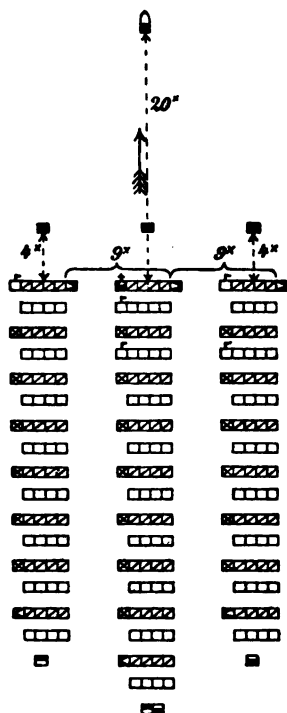
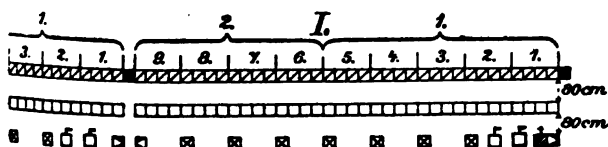
- | | |
|---|--|
|  Company commander. |  File closer (squad leaders). |
|  First lieutenant. |  Range finder. |
|  Second lieutenant. |  Man in front rank. |
|  First sergeant. |  Man in rear rank. |
|  Right guide (N. C. O.). |  Bugler. |
|  Left guide (N. C. O.). |  Drummer. |

PLATE I.—*Company in line.*

If the color is with the company, its place is to the right of and alongside the platoon commander of the right platoon, the two noncommissioned officers who form the color guard being in the line of file closers.

PLATE II.—*Line of platoons in column of squads.*

1, The platoons can also be placed alongside of each other in column of twos; 2, the company commander regulates the position of the additional officers; 3, if the color is with the company, its place is two paces in front of the leading squad of the center platoon, one of the color guard being alongside and to the right, the other to the left.



(noncommissioned officers). The squad leaders stand in rear of the left file of their squads at a distance equal to that between the ranks, with the exception of the right guides (noncommissioned officers), who stand in rear of the right file of their squads, and who step into the place of their platoon leader as soon as he leaves his place. The left guide of the company places himself alongside the left flank man of the front rank if no officer is there.

87. Company column (Pl. II).

88. Platoon column (Pl. III).

89. Section column. Platoon column divided into sections, paragraph 127.

Supernumerary officers and the leaders of the right flank squads take post on the right flank of the sections.

Sections other than those with which the platoon leader is present are taken charge of by the senior squad leader if a supernumerary officer is not available for this purpose.

90. Column of squads (Pl. IV).

91. The march column (Pl. V).

At **Order of march** the march column, as shown in Plate V, is formed from the column of squads. The squads within the section (within the platoon if the number of files is small) march at a distance equal to that between ranks. The section chiefs, musicians, and nurses form fours in the spaces left vacant in the formation.

The depth of the column must not be increased unless ordered.

For the conduct of the march see Field Service Regulations.

At **Column of squads** the column of squads is formed as shown in Plate IV.

92. In column of twos (company in line faced to the right or left) the platoon leaders and the officer at the left of the company step on the left (right) side of their flank man alongside of whom they stood in line.

The same positions are taken in the platoon in column of twos.

Alignment; Touch of Elbow; Covering.

93. When the alignment is good each man whose position in the line is faultless, will see, by turning the head toward the dressing flank, only the man next to him on the right (left)

with the right (left) eye, and will catch only a glimpse of the whole line with the other eye.

94. Alignment and touch of elbow at a halt and on the march are toward the right, unless otherwise ordered.

Exceptions:

- (a) When the company is in line and moving straight to the front, it is on the leader of the middle platoon; with two platoons, on the leader in the center.
- (b) While moving in company column as well as when the squads have turned to the right (left) in platoon column, on the middle platoon.
- (c) While marching obliquely, it is on the flank in the direction of the march.
- (d) In column of twos, on the side of the platoon leader.
- (e) When turning, the alignment is on the marching flank and touch toward the inner flank, as prescribed in paragraph 136.

95. In company column the platoon leaders indicate the guide for their platoons. Within the company, alignment of the leading squads only is required.

96. In column the leaders on the directing flank cover and maintain distance so far as the ground permits. Only in platoon column are all files required to cover.

97. As soon as the command **At ease** is given at a halt each man must correct touch, alignment, and cover.

98. If the alignment is to be made at a halt, the command, **Dress (Eyes Left, dress)**, will be given.

The front rank dresses; the rear rank, the file closers, and musicians first cover and take distance, then dress. At **Eyes straight Ahead** (front) the heads are turned straight to the front.

99. For parade purposes the alignment can also be made at "the order" on posted guides. **Guides (X) paces to the front.** With the company in line, the right guides of platoons and the left guide of the company, and in the platoon column the right and left guides of the leading platoon, step the required number of paces, in front of their flank files, execute right (left) face and cover.

KEY TO PLATES III, IV, AND V.













- | | |
|---|--|
|  Company commander. |  File closer (squad leader). |
|  First lieutenant. Second lieutenant. |  Range finder. |
|  First sergeant. |  Man in front rank. |
|  Right guide (N. C. O.). |  Man in rear rank. |
|  Left guide (N. C. O.). |  Bugler. |
| |  Drummer. |
| |  Hospital attendant (N. C. O.). |

PLATE IV.—

If the color is with the company, it is to the right and alongside of the platoon commander of the leading platoon when in platoon formation, the color guard being in the line of file closers; when in column of squads two paces in front of the leading platoon, one of the color guard being alongside to the right and the other to the left; in the marching column formation, in the first rank.

The positions of the company and the platoon commanders are regulated by field-service regulation. The company commander regulates the positions of the additional officers.

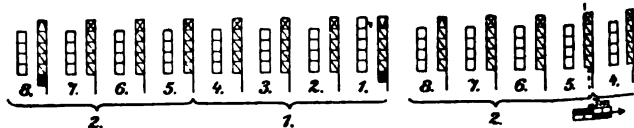


PLATE V.—

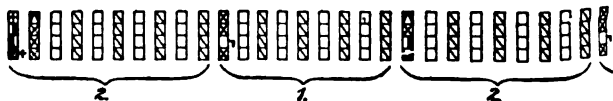
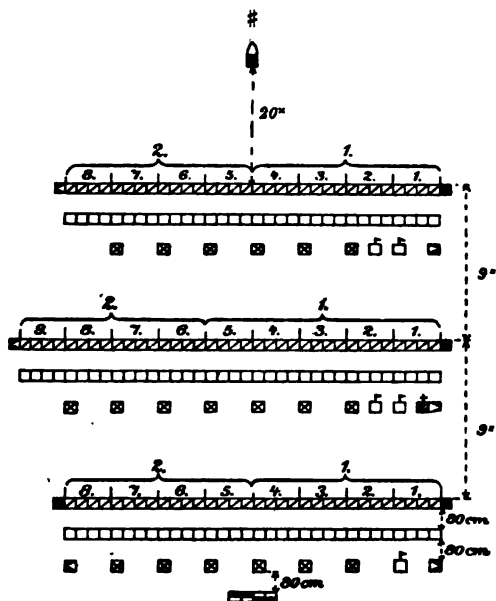
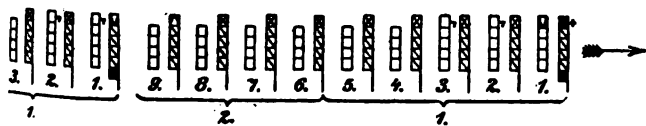


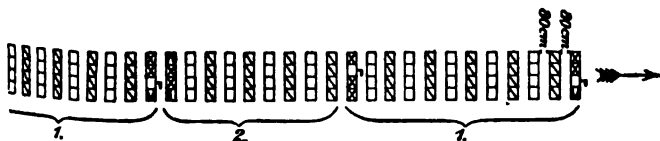
PLATE III.—*Platoon column.*



Column of squads.



Marching column.



If the color is with the company the color bearer steps to the front in place of the right guide.

At **Dress (Eyes.....Left, dress)** the company moves up, without regard to the step, to the line established by the guides, and dresses. In order to establish the line quickly the men are allowed to glance toward the flank opposite to that on which the alignment is made.

For the rear rank, the rear platoons, etc., see paragraphs 96 and 98.

At **Eyes straight.....Ahead**, the guides return to their places and all look straight to the front. The platoon leaders step out of ranks so that the guides can pass through.

100. The company must be able to align itself quickly and with certainty, "without command," on any desired file, squad or neighboring detachment, and also on a new front.

Facings, march by the flank and to the rear and manual of arms.

101. The facings and the manual are executed in unison; fixing and unfixing bayonet individually and as quickly as possible.

102. For purposes of drill in the facings, and marchings by the flank and to the rear, the preparatory command **Face** precedes the regular commands.

If this preparatory command is omitted, the platoon leaders and the officer on the left flank of the company take the places indicated in paragraph 92. In facing and marching to the rear they and the men in the blank files step up into the line of the rear rank. In both cases they remain in these places until the original front is again resumed.

At **Change front**, the front becomes the rear. Platoon leaders, file closers, and musicians take their new positions at route step and by the shortest line.

103. Colors and officers salute only at **Attention, presentarms.**

Loading and Firing.

104. Loading is executed individually as quickly as possible. File closers and guides do not load.

105. When the company fires in close order, the company front must be approximately perpendicular to the line of fire. If necessary to attain this the company must be turned to the proper extent beforehand.

106. Two kinds of fire are employed, volleys and fire at will. Volleys are delivered by companies or platoons.

107. While firing, and when not merely a matter of drill, the company commander goes wherever he can best observe the effect of the fire.

When firing volleys by platoons the platoon leaders take post behind their platoons.

If file closers or musicians are in front of what is to be the firing line, they, at the preparatory command **For Firing** double time around the platoon flanks and take post in rear of the rear rank.

If "the ready" is taken from the "shoulder arms," officers, file closers, and guides come to "the order" at the preparatory command.

108. Not all the men of the company are always equally ready for firing. Some will have to take a clip from the cartridge box while others will still have cartridges in the magazine. If the volleys follow each other rapidly, it may happen that the same men do not fire at all the volleys.

109. The command **Cease firing** is repeated by all platoon and squad leaders.

All other details concerning Loading, Firing, and Unloading are regulated in accordance with paragraphs 45 to 59 inclusive.

To stack and take arms.

110. At **Stack**, the odd numbered files face to the left, the even, to the right. Each man places his piece with his right hand at the heel of the outer foot, barrel to the right. At **Arms**, the two men of the front rank first, and afterwards the two files lay their pieces with the ramrods together and then face to the front. The front rank steps one-half pace in front of, and the rear rank one-half pace in rear of, the stacks. The file closers lay their pieces on the nearest stack. The company stands "at ease."

111. **To Arms.** The front rank steps quietly to the front of the stacks, the rear rank to their rear, and stand "at ease." **Take** (the odd numbered files face to the left, the even, to the right) **Arms.** The men grasp their pieces with the right hand, disengage them without unnecessary force, face to the front, and stand "at ease."

Marching.

112. To march to the front. **Company** **March.** **Company** **Halt.** All march straight to the front. When marching in line, the leader of the guiding flank, and in company column, the leader of the guiding platoon is responsible for the maintenance of the proper direction.

In general the alignment must be maintained by means of uniform pace and proper touch of elbow. The man is permitted, however, from time to time to cast a glance toward the side of the guide. Pressure from the side of the guide must be yielded to, while from the opposite direction it must be resisted.

113. The company must be drilled in marching on directing points and in following the leader without command.

114. The company must also execute, without command, small turnings such as arise from slight shiftings of the directing point. In case of more material changes in the direction of march, the command designating the new marching direction precedes the command for the turn (paragraph 136).

115. If, while marching or after being halted, the command **kneel** or **lie down** be given, paragraphs 31-34 apply.

The company being in line or in platoon column the file closers step back one pace at "lie down," and at "rise" they step forward two paces. In company column, in column of squads, and in march column, the files, when lying down, take intervals of about half a pace from the center outward, the men of the rear rank placing themselves opposite the openings. After rising, touch of elbows is again resumed.

116. If the guide is to be shifted to the platoon leaders when marching in column to the rear (company column excepted), the command **Guide left** must be given. For "Change front" see paragraph 102.

117. Oblique march. **Right oblique (left oblique)** **March.** The men march keeping the shoulder of the one behind that of the other. The original direction is again resumed at **Left oblique (right oblique)** **March.**

The oblique march is to be made use of for short distances only.

118. The march in column of twos (92) is executed at route

step, the distance being increased to 80 centimeters. This distance is retained upon halting until further orders. For short distances this march may also be executed in step.

Changes of Formations and Turnings.

119. At changes of formations, officers, noncommissioned officers, and musicians take their prescribed places without delay as soon as practicable. (See also paragraphs 102 and exceptions, 138, and 139.)

If need be, the company commander gives orders therefor.

120. If a new formation is taken from the march in column of twos at route step, touch and distance are taken without command.

121. Distances and intervals can be changed in all columns by order of the company commander.

When intervals are changed while in company column, the platoons follow their leaders without command.

If the platoons become separated from each other by more than the width of the company in line, the command of the company commander ceases to affect the company as a whole.

PLOYMENTS.

122. Ployments are executed from a halt as well as when marching at route step or double time. When executed on the march, the march is continued at route step without command after the ployment is completed.

123. To form company column from line. If marching, **Company column Form (Form March, March)**. The squad on the right of the platoon continues the march. The platoons ploy to the right and then close on the middle platoon, which shortens step. If company column is to be formed on any other than the middle platoon, or if but two platoons are present, the command **Company column right (left) Form (Form March, March)** is given. Plying and closing in are executed toward the designated side.

124. To form platoon column from line. Being at a halt or on the march: **Platoon column Form (Form March, March)**. The center platoon stands fast and rectifies its alignment (or continues the march). The flank platoons are formed in rear of it by the shortest route (at double time),

the platoon on the right being in the center, the one on the left at the rear of the column.

If the platoon column is to be formed on any other than the center platoon or if but two platoons are present, the command **Platoon column right (left) Form (Form March, March)** is given.

125. To form company column from platoon column. Being on the march: **Company, column right (left) Form March, March.** The right (left) squad of the leading platoon continues the march; the remaining squads of this platoon form behind it. The platoons in rear, while plying on the right (left) squads, place themselves abreast of and to the right (left) of the leading platoon.

126. To form column of squads from company column. Being on the march: **Column of squads Form.** The center platoon continues the march. The outer platoons halt at the command of execution until disengaged, when they follow, the one on the right following first.

At **Column of squads, right (left) Form**, the ploy is executed toward the platoon on the designated flank.

127. To form half-platoon column or column of squads from platoon-column and to form column of squads from the half-platoon column. Being on the march: **Half-platoon column (column of squads) right (left) Form (Form March, March).** The half platoons (squads) on the designated flank continue the march; the others place themselves in rear. The rear platoons, during the formation of column of squads, halt until they become disengaged.

128. To form column of squads from platoon or half-platoon column. Being at a halt: **Column of squads, right (left); Route step March.** At the command **March**, the squad on the designated flank of the platoon (half platoon) in front, marches straight to the front. The remaining squads of this platoon (half platoon) place themselves in rear of it. The platoons (half platoons) in rear proceed in like manner as soon as they become disengaged.

DEPLOYMENTS.

129. Deployments take place either at route step or at double time. The subdivisions as they come up march

(double time) somewhat beyond the line of direction and take alignment and touch toward the one on which the deployment is made; the latter rectifies its alignment at a halt.

In column of twos, deployment is made on the flanking men situated at the front and side toward which deployment is made; in all other columns, on the leading subdivisions pertaining thereto.

130. The formation and, when necessary, the side toward which the deployment is to be made, must be designated in the command:

| | | |
|------------------------|---|--|
| In squads | } | Deploy.....right (left). Deploy..... March. (March, March.) |
| In half-platoon column | | |
| In platoon column | | |
| In company front | | |

131. To form company front at a halt and on the march
(a) from company column: **In company front, deploy.....
March (March, March).** The platoons deploy to the left (execute left front into line), the outer ones gaining their interval at the same time. If the preparatory command contains the addition **Right (left)**, all the platoons deploy toward the designated side; at the same time they take their interval from the platoon situated on the opposite flank.

(b) From platoon column: **In company front, deploy.....
March (march, march).** The center platoon marches to the right, the rear platoon to the left.

If the preparatory command contains the addition **Right (left)**, deployment takes place to the designated side.

(c) From column of twos, squads, and half platoons; as a rule, platoon column is first formed and from this company front.

132. To form company column from column of squads: **Company column.....Form.** The leading platoon stands fast (halts), the other two platoons place themselves alongside it by wheeling, the center platoon on the right and the one in the rear on the left (paragraph 137).

At **Company column, right (left).....Form**, the formation takes place toward the designated side.

If special haste is desired, the movement may be executed at double time.

133. To form platoon column from company column: **In platoon column, left (right) deploy March (march, march).** The platoon on the designated side deploys according to paragraph 129; the other two place themselves in rear of it.

The deployment is executed in the same manner when the platoon column has been wheeled by squads, or the files faced to the right (left).

134. To deploy the company in a different direction it is the rule when the angle is large to assume the new direction by command and then deploy.

The company commander may also, before giving the command to deploy, designate the point of direction or the amount of the turn—e. g., **Direction** on the top of the church steeple, or one-eighth (one-sixteenth) **Right (left) turn. In company front deploy March (march, march).** The leading unit takes up the designated direction and the ones in rear take it while deploying.

FORMING COLUMN OF TWOS.

135. Being on the march: **Form column of twos, right (left) Face.** The man on the designated flank continues the march straight to the front, his rear-rank man places himself to his right (left), the rest of the files place themselves in rear, executing by the right (left) flank. Half platoons and platoons in rear, halt until they become disengaged.

TURNING.

136. Turnings by units exceeding the front of a platoon are executed at route step or in double time.

Right (left) turn March (march, march). At **March**, the march is taken up if at a halt, and if already on the march, the turn is begun.

The alignment is toward the marching flank, the touch toward the pivot. The rear-rank men keep their heads straight to the front and cover their file leaders in marching.

The officer (noncommissioned officer) on the marching flank marches in the usual cadence and turns gradually toward the pivot. In case there is a large number of files, he first advances a few paces straight to the front before turning.

He keeps his eye upon the space he has to cover and from time to time glances along the line.

The man on the pivot gradually turns in his place at a halt, in proportion to the turn of the marching flank. If there is an officer or noncommissioned officer on the pivot flank, he dresses on the pivot file.

The men shorten the step to accord with their distance from the pivot, without stamping their feet and without raising their knees unnecessarily. Touch must not be lost; the pressure from the pivot must be yielded to, but resisted from the marching flank. At **Halt**, each man takes another step and halts. The preparatory command **Forward** ends the turn; marching is continued in the new direction with the half step. With the company in line and in company column, alignment is taken toward the leader of the guiding platoon; otherwise toward the guiding flank. At **March**, the march is continued at the prescribed pace.

While turning at double time, alignment need not be preserved.

137. If a column turns, the individual units execute the turn in the same place one after the other (moving pivot). The pivot is cleared by the turning units so that the pivot flanks describe a small arc, the distance from the unit in advance being diminished temporarily.

138. **Squads right (left) turn March. Halt or Forward March.** Each squad executes a turn of 90 degrees.

If when turning from the column of squads there are file closers on the side toward which the movement is to be executed, at the preparatory command they step behind the files (to the front when faced about) alongside of which they are.

Platoon leaders remain in their places when a turn is executed toward their side, unless ordered to the contrary.

139. When from platoon column "squads right (left) turn" has been executed, the officers, noncommissioned officers, and musicians at the command **Company column** take the places indicated in Plate II; when from company column "squads left (right) turn" has been executed, at the command **Platoon column** they take the places indicated in Plate III. If these commands are not given, the places previously occupied are retained.

140. From company in line: **Right (left) squad forward, squads right (left) turn..... March.** The designated squad moves straight to the front, shortening the step somewhat, all the other squads turning to the right (left). After the execution of the turn, the command **Halt or Forward..... March** is given.

The Charge.

141. If the company is to advance to the charge in close order, the bayonet is fixed and at the command: **To the charge arms..... Right,** the piece is brought to "trail arms" and the charge step taken up (see paragraph 65). The drums beat to the charge.

At the proper distance from the enemy the command **March, March** is given.

The drums beat to the charge continuously, while the buglers blow the signal "advance quickly."

Immediately before the assault the command **Charge..... Bayonet! Hurra!** is given. The leading rank charges bayonet, everyone continually huzzaing, rushes on the enemy for the hand-to-hand encounter, until the command **Company..... Halt** is given. The two front ranks bring their pieces to the "ready." If the enemy is beaten, a pursuing fire is, by command, opened as soon as possible, and if space is available, the troops are deployed.

B. EXTENDED ORDER.

IN GENERAL.

142. The change from close to extended order is effected through the formation of skirmish lines. In these the interval between skirmishers may differ. If the interval be not designated in the command, two paces are taken; if any other interval is desired it must be ordered. Loose skirmish lines result if the interval is greater than two paces, and compact ones if less. Very large intervals increase the difficulty of leading; the minimum interval must still permit the skirmisher the free use of his piece.

143. At every deployment of skirmishers the unit which is to deploy must be named and, when necessary, the direction of march and the guide designated. It is better to have the

guide "center." The unit on which direction is maintained is called the guiding or base unit.

144. In extended order the soldier is not bound rigorously to a definite place, nor to strict military carriage, nor is the handling of the piece to be strictly in accordance with the prescribed manual. On the contrary, he is required to be dexterous in the use of his weapon and in utilizing the terrain, self-reliant, and unremitting in attention to his leaders and observation of the enemy. Judgment, self-reliance, and boldness must be awakened in the breast of the young soldier and in the course of his service be continually strengthened.

145. Of especial importance is the thorough training of the minor leaders. Their position on the firing line must be such as is rendered necessary by the enemy's fire. All lance corporals and especially suitable men, are to be trained as squad leaders.

146. It is of fundamental importance to this training that the practical be placed above mere form.

a. INDIVIDUAL TRAINING AS MARKSMEN.

147. Only careful individual training furnishes a sure foundation for good service of troops in battle. It is as necessary in extended order as in close order and the instruction must be continual during the entire service of the soldier. The rifle must be placed in the hands of the recruit a few days after his arrival, in order to make him familiar with the use of his weapon. He must be instructed as soon and as often as possible on varied ground.

148. The marksman must at the beginning learn:

The fundamental principles of small-arms firing.

To examine and utilize the ground.

To see and recognize targets (training of the eye).

To estimate distances and to set the sight.

149. The principles of fire on the skirmish line are first demonstrated to the recruit by means of small detachments of men proficient therein.

His knowledge should be increased by a few participations in simple battle maneuvers and on the conduct of attack and defense, while confronted with an opponent.

150. When the soldier has made some progress in loading

and aiming, exercises therein are given on varied ground against objects of a military nature.

The soldier must be trained to load quickly, to adjust the sight rapidly and accurately, and to aim promptly and fire calmly against targets which are able to open fire quickly.

151. The accidents of the ground which afford cover from the enemy's sight only and those which also afford cover from his fire should be pointed out to the soldier. The value of field works should also be taught.

152. The soldier must be taught that the most important thing to be obtained is an effective fire, and that he must therefore subordinate all considerations of cover to this end and so place himself as to be able to keep the enemy constantly in view. It is only when he is actually aiming that the soldier is able to judge of the amount of cover he is able to utilize.

If firing is not to take place, the marksman must make use of cover in such a way that he will be screened both from the sight of the enemy and from the effect of his fire as much as possible.

153. In open country the marksman can not long remain exposed to the enemy's fire except in the lying position.

The power of observation and of recognizing objects while in the lying position must therefore be taught with particular care.

154. Attention must be paid to the different degrees of visibility of troops, depending on the color of their clothing and the background and light.

155. The skirmisher must skillfully overcome obstacles of every description. He must be trained particularly in leaping over or clambering through ditches, climbing over walls and hedges.

156. He must be taught how to advance stealthily by utilizing even the smallest depression of the ground and all cover. Even in the open country he must be able to advance by stooping and creeping, exposing himself as little as possible.

157. The marksman is trained in the use of the spade. He must learn to intrench himself quickly and, even when lying down, to provide cover rapidly.

158. It must be constantly borne in mind that the end and

object of all these exercises is to train the soldier to be a marksman who thinks for himself and acts with precision.

A firm resolve to inflict damage on the enemy and loyal endeavor, though unobserved and undirected, to do one's level best, are the foundations of superiority.

b. FILE AND SQUAD.

159. Files and squads in their strength and composition are the same as in close order. Surplus files belong to the nearest squad to the right. Each squad has a leader.

160. Skirmishing must be taught in the file and squad. They must be trained in:

- The different ways of deploying;
- Assembling and forming;
- Movements of the line, with increased and diminished intervals;
- Advancing by rushes and by creeping;
- Occupying a position;
- Loading in all positions of the body and while marching;
- Aiming in all positions at different ranges and from behind cover;
- The different kinds of fire, cease firing, and the transmission of orders and signals.

161. As soon as precision in the simpler movements is attained, the squad must be trained on varied ground. The principles remain the same as for individual training, except that the squad must be considered as a whole and attention to the leader taught.

162. The training of the squad leader requires particular care. He is the assistant of the platoon leader and at the same time the leader of his squad. He must be trained in using field glasses for identifying the target and for observing the effect of fire, in estimating distances quickly and reliably, and in giving commands.

163. He must be able to lead the skirmishers of his squad within the space allotted to them, keeping them under cover as much as possible, and rapidly and skillfully bringing them into position. He must constantly supervise the setting of

the sight, the distribution, careful delivery and rapidity of fire, and the expenditure of ammunition.

164. When the platoon is in extended order, the same conditions of cover and movement do not usually obtain along its entire front. The enemy's fire will frequently make uniform movement of the platoon impossible and fire control difficult. Therefore the squad leader must be able to conduct the fire of his own squad, to utilize, without command, every opportunity which presents itself for approaching the enemy, and to support each movement of the neighboring squads by means of his fire.

165. The squad leaders themselves fire only when their other duties permit it; conditions will often allow this in a long-continued fight in the same position.

C. PLATOON.

The platoon commander.

166. In extended order the platoon forms, as a rule, the unit of command and fire control.

167. The platoon commander orders the formation of the skirmish line, the direction of march, and, when necessary, the guide. He determines the intervals according to the purpose of the battle, the space to be occupied, the distance from the enemy, and the nature of the ground.

168. In defense, he places his platoon in position and makes all preparations for opening fire.

169. In attack, he endeavors to advance, with as little loss as possible, to a position where he can successfully begin the action. With this purpose in view, he leads the skirmish line forward, without undue extension, as long as the nature of the ground allows and the fire of the enemy permits. Open stretches can be passed over by running.

If such a method of advance is impossible at the outset on account of the character of the country, or if it must be abandoned because of the enemy's fire, the platoon commander can form very open half-platoon or squad skirmish lines and permit them to follow each other at irregular distances, always remembering that he must unite the platoon when under cover in order to control it when opening fire.

170. After the platoon has opened fire, well prepared platoon rushes, supported by the fire of neighboring units, form the simplest and quickest means of advancing.

When platoon rushes become difficult, subdivision of the front into smaller units advancing alternately will become necessary. The manner in which the half platoons or squads then advance will be irregular and varied. They can, while rushing forward, spread out as much as the fire of the neighboring detachments permits and again unite under cover. They can advance by file or even individually, and also gain ground by creeping.

The platoon commander must continually bear in mind that the most effective aid to an advance lies in superiority of fire. He must therefore always keep his platoon in hand so as to control its fire and movements and so that his personal influence may be felt.

171. Attention to utilization of the ground must not divert the attention of the platoon commander from the enemy nor shift the designated direction of attack.

Adjacent units must not be hindered in their movements or fire.

In no case must the taking of cover by the individual interfere with the action of the unit as a whole.

172. When the platoon commander can gain an advantage or utilize an opening afforded by the enemy he is bound to act on his own initiative; but it must be perfectly clear to him; taking into consideration the whole command, how far he may properly operate independently.

173. The platoon commander is responsible for ascertaining the correct ranges. He keeps two range finders (men who estimate distances) close to him, and they, unasked, inform him of the result of their estimates. He also utilizes the estimates of squad leaders who are near to him. Special training is necessary in order to obtain uniform results in estimating distances.

The range finders also aid the platoon commander by observing the enemy and their own adjacent troops, as well as by maintaining communication with the company commander in so far as this is not done by the musicians (par. 221).

The platoon commander permits the range finders to take

part in the action only when their duties as range finders have become of secondary importance.

FORMATION OF A SKIRMISH LINE.

174. The formation of the skirmish line must be executed quickly from any formation in close order, in any direction and with the utmost order and silence. It is executed when in line on the right squad of the second section, and when in column of squads on the leading squad. Otherwise the guiding or base squad must be designated in the command.

The platoon in column of squads can also be formed in skirmish line by deploying toward both flanks instead of one. The squads of the leading section then deploy to the right while those of the rear section deploy to the left on the leading squad of the platoon.

175. At the command to deploy the piece is carried as for the charge and then at will at the balance, muzzle elevated, or under the arm. The sling may also be lengthened.

The piece may also be slung when it is important to have the hands free, e. g., in thickets, on steep slopes, or when creeping.

176. If a platoon is to deploy to the front from a halt or on the march, the command **(X) Platoon Deploy**, or **(X) Platoon, on (X) Squad Deploy**, is given. At **Deploy**, the squad leaders spring quickly to the front and form the skeleton of the skirmish line. The leader of the base squad goes straight to the front or in the designated direction, shortening the step; the remaining squad leaders hasten to the front at a right or left oblique, depending on their position with reference to the base squad, and take their interval from the adjacent squad leader in accordance with the interval given in the command for the deployment.

The skirmishers follow their squad leader at a distance of 10 paces. The men of the rear rank step to the right of their file leaders, each man taking 2 paces interval.

If a greater or less interval is to be taken, the platoon commander so commands, e. g., **(X) Platoon with four paces interval (with half a pace interval) (without interval) Deploy**.

The platoon commander indicates to the leader of the base squad the direction of march and, accompanied by the range

finders and the musician, goes at least 10 paces in advance of the line of his squad leaders. As a rule he is in front of the center of his platoon, but may change his position at will. He must be quick witted if he desires to lead skillfully in the field, avoid collision with the adjacent platoons, and at the same time observe the enemy.

177. If the deployment is to be made obliquely to the front or toward the right or left flank, the new front is assumed before deployment. Designation of the direction can, however, also be given in the command to deploy, e. g., **(X) Platoon, direction right oblique on the windmill..... Deploy.**

The leader of the base squad immediately takes up the new direction.

178. If a platoon is to deploy without advancing to the front, the command, **(X) Platoon (on X Squad) on line..... Deploy** is given. The squad leaders form (according to paragraph 176) the skeleton line in advance of the front of the platoon in close order taking the position they are to occupy. The squads place themselves behind their squad leaders. They do not move up to the line of squad leaders until the command, **Form** (par. 186).

179. If the deployment is to be made rapidly, the command **(X) Platoon..... March, March, deploy** is given.

180. If a platoon marching to the rear is to deploy, it should, as a rule, be first faced to the front and then the command, **(X) Platoon on line..... Deploy**, given.

MOVEMENTS AND TAKING POSITION OF A SKIRMISH LINE.

181. An important object in the training of skirmish lines is the maintaining of systematic movements of the lines for long distances and in difficult country while retaining the direction of march. With perfectly trained troops verbal commands are frequently replaced by signals. No value is to be attached to the exact maintenance of equal intervals or the observance of dress.

182. The skirmish line moves forward with a free, natural pace and at the usual cadence. On stepping off the pieces must be locked and the cartridge boxes closed without command.

183. Platoon and squad leaders are in front of the skirmishers when moving to the front or by the flank, i. e., toward the enemy. When marching to the rear the squad leaders go to the side furthest from the enemy and take up the direction of march. The platoon commander, however, remains on the side toward the enemy.

184. The movements of the skirmish line consist of the march to the front, or to the rear, of the entire platoon or of individual units; (**X**) **Platoon (half platoon).....March (March, March) (to the rear, march);** for small shiftings to the flank: **right oblique (left oblique).....March;** in movements by the flank—behind cover and out of the enemy's fire.....; **By the right (left) flank.....March.**

185. Small changes of direction of the march of a skirmish line requiring a turn are executed either by declaring a new direction of march, or are begun by a turn at a command which also designates the new direction of march, e. g., **Right turn, march, direction, the tall poplar.**

Larger turns are executed by gradually deploying in the new front. With long lines échelons will result from this movement; rectification takes place gradually or at the next halt (par. 286).

186. When the opening of fire is not contemplated, the movement is stopped by **Halt** or **Lie down (kneel)**. Platoon and squad leaders remain in advance of the line.

The command **Form** is given when it is desired to commence firing from the march or at the halt. The skirmishers move forward until they arrive on a line with the platoon leaders. If possible, the sights should be set beforehand.

187. If, after the occupation of a position, fire is not opened immediately or a pause in the firing takes place, the platoon commander may allow complete cover to be taken. He directs who is to take charge of observing the enemy. At **Form**, the skirmishers come to the "ready."

188. To advance by rushes, the command (**X**) **platoon (half platoon) (squad) rush..... Forward March, March** is given.

At **Rush**, the skirmishers complete the loading, lock pieces, close cartridge boxes, and prepare to rise. Skirmishers lying down take the piece in the left hand, lean on the right, and draw the right knee as close to the body as possible without thereby raising the upper part of the body from the ground.

After a short pause, which serves to complete these preparations, the platoon commander, while rising, gives the command, **Forward March, March**. Hereupon the skirmishers jump up and rush forward. The length of the rush can seldom be more than 80 meters (paragraph 337). Even though rushes are, as a rule, to be made as long as possible, yet short rushes, made so as to afford no time for the enemy to fire, must also be practiced. The main points to be observed are a quick and simultaneous rising and a rapid rush forward.

189. The rush is completed according to paragraph 186, the sight, when necessary, is changed, and fire resumed without command.

Frequently the new firing position can be designated before the rush.

190. If, upon arriving at the position selected by the platoon commander, it becomes apparent to him that many of the skirmishers must kneel or stand in order to fire on the enemy, he must try to continue the advance to a better position. If this is impossible, he can, if the circumstances of the battle permit, temporarily suspend the fire.

191. The attack by a skirmish line is executed according to paragraph 141.

Kinds of fire and commands.

192. Only a skirmish line actually in position fires.

193. As a rule fire is delivered at will.

The use of volleys is restricted to exceptional conditions. They are useful when an enemy is surprised or for obtaining better control of one's own troops.

194. Commands for both classes of fire must be as brief as possible. They fix first the direction, then the object, range, and kind of fire. The object must be clearly designated.

Detachments of the enemy must be designated just as they appear to the skirmishers, e. g., "The gun farthest to the right" and not "The gun on the left flank of the battery." After the object is designated and the sights fixed, fire is commenced by the command, **Fire at will**. Volleys are delivered by command.

At Skirmishers straight ahead: At 800 [meters]: Fire at will.

At Cavalry right oblique: At 900 [meters]: Fire at will.....
At 700 [meters].

At Right oblique, columns on the green knoll: At 1,000 [meters]: Ready: Aim Fire: Load.

195. If two ranges have been used and only one is to be changed, the designation of the range is discontinued in the command. If, for example, firing has taken place with ranges of 1,100 and 1,200, the command **Change 1,200 to 1,000** is given.

196. The rapidity of fire is left to the choice of the skirmisher in fire at will. Good training and careful development will insure the proper use of this liberty.

The skirmishers should be required to aim carefully at the designated object. The necessity for accuracy determines in a measure the rapidity of fire.

Adjacent skirmishers will assist each other in observing the enemy and the effect of fire. In rapid fire at will speed is attained by accelerating the loading and aiming movements, as well as by shortening the time used for observation.

If the leader considers a decrease or increase in the rapidity of fire desirable, he commands, **Slower (quicker) fire.**

197. To stop the fire at will, the command: **(X) Platoon, Cease Firing,** is given. The command is repeated loudly by all the squad leaders, and if not then heard throughout the line it is repeated by all the men who have heard it.

At **Cease Firing**, fire and loading are discontinued at once. Skirmishers who are in the act of aiming recover arms. Absolute silence and attention must be given to the commands that follow. If fire is to be resumed at the same object, it is not again designated, but the command is given: **Continue firing.** If an interruption of the firing takes place, this is relieved by **Continue loading** (paragraph 50).

Effect of fire.

198. Fire effect depends on the number of pieces and their proper handling.

Flanking fire is particularly effective at all distances and against all objects. The more concentrated the fire and the more it is in the nature of a surprise, the greater effect it produces.

199. The effectiveness of the fire of skirmishers depends, apart from the degree of their training and practice, on their bodily fatigue and mental excitement.

Fire direction and control.

200. Fire must be controlled as long as possible in order that the commander may be able to direct it.

201. On the firing line orders and commands are heard with difficulty on account of the noise of battle. Orders must, therefore, be repeated by each squad leader, and if this does not suffice, then they must be transmitted from man to man. For this the squad leaders are held responsible; they must indicate that they understand the order by raising their hand.

202. Accurate estimation of distances is the foundation for accurate fire. It can be supplemented, but not replaced by the aid of a range finder, by means of maps, and by information obtained from artillery or infantry actually engaged.

203. Opening of fire depends primarily on the tactical situation. The determination of the time to open fire, as a rule, falls on the commander of the foremost line.

It is a fundamental principle that fire is opened only when profitable effect can be expected from it, or when a further approach to the enemy without the support of fire requires too great a sacrifice. Opening fire too early betrays uneasiness and a lack of confidence. The expenditure of ammunition without adequate effect is a useless and therefore detrimental expenditure of one's own strength. An ineffective fire increases the confidence of the enemy.

204. Tactical considerations are paramount in the choice of a target. A frequent change of target dissipates strength.

Reenforcements of the enemy which move up from the rear to the skirmish line under fire will, as a rule, cause no change of target, as they must pass through the zone where they are exposed to the scattering bullets.

205. The object must be so designated as to enable the skirmisher to find it quickly. If the object can be seen only with field glasses, a zone of the ground must be indicated as the target. It is also recommended that field glasses be passed among the men.

206. The division of fire along the front of the enemy is of special importance. To the subdivisions, therefore, the zones in which they are to distribute their fire are exactly specified. In order that no portion of the enemy's line may escape fire, small overlaps are recommended. In general, each division and each skirmisher fires against that part of the enemy directly in front. However, cross fire must not be neglected.

The fact that some parts of the enemy's front are less visible than others must not cause the skirmishers to neglect them and to fire exclusively at the more visible parts. This must not be held to prohibit taking advantage of particularly favorable circumstances for fire action, e. g., rushes of the enemy.

207. The rapidity of the fire is regulated by the conditions and purpose of the battle, the available ammunition, and the nature of the target. Long range, unfavorable light, and difficulty in seeing the target must diminish the rapidity of fire. During the greater part of a long-continued action economy of ammunition is required.

Generally considerable increase in the rapidity of fire decreases the accuracy of the individual shot and increases the depth of the sheaf. But the conditions and purpose of the battle and the movement of the enemy will often require increased rapidity of fire in order to attain greater effect in a shorter space of time, and thus justify a larger expenditure of ammunition.

The skirmishers must be trained to recognize and take advantage of such situations of their own accord.

208. The utmost rapidity of fire is required: In the attack during the last preparation for the charge; in the defense to check the enemy; in repulsing cavalry, and in all phases of the battle in which a sudden and close encounter with the enemy takes place; in pursuit.

209. The effect of fire must be continually observed by the use of field glasses. The leader must endeavor to ascertain if his dispositions are correct by observing the strike of the bullets and the conduct of the enemy.

If direct observation from the firing line itself is interfered with, observers can be placed to the side or in rear, who will transmit their observations by concerted signal.

210. Fire discipline supplements fire control. It comprises the conscientious execution of orders that are given in action, the precise observance of the prescribed instructions for the use of the piece, and for the conduct of the individual in battle.

This embraces: Taking advantage of the ground; care in setting the sight and delivery of fire; constant attention to the orders of the leaders and careful observation of the enemy; an increase in the fire when the target becomes favorable, and a cessation of fire when the enemy disappears; economy of ammunition.

If during the course of the battle, it becomes impracticable to exercise perfect fire control, or if fire control of any kind becomes impossible, each man must preserve presence of mind and act deliberately, choosing his own target and range.

In order to insure independent action, the men must be accustomed to battle conditions in which fire control is wanting and trained to act properly in such cases.

Closing up; Assembling; Forming.

211. The most effective way to avoid the mixing of subdivisions in battle is to cause each unit to close up the gaps toward its leader when losses take place.

Squads which have suffered greatly unite with adjacent squads under a common leader.

This closing up can, as a rule, be executed only while on the march. It must be done gradually and the prescribed intervals must be maintained. Crowding on the firing line increases the losses and causes dangerous gaps along the front.

212. If, in the course of a fight, it is no longer desirable to retain the extended order each leader, beginning with the squad leader, must assemble his detachment at once and place it under the control of the commander of the next higher unit.

Without awaiting orders the leaders must promptly form their units in close order.

213. To pass from a skirmish line to close order the command: **(X) Platoon (squad) Assemble** is given, or signals may be used (par. 11).

If not otherwise specified, the platoon is assembled in line, the right flank opposite the platoon commander. While

being conducted to their places in line the squads close in behind their squad leaders at the "shoulder arms" and arrive at the platoon in close order, where the squad leaders cause them to take the "order arms."

The assembly is executed in silence and if at the halt, with the front continually toward the enemy.

If the assembly takes place on the march, the assembled squads close in behind the platoon commander at the "shoulder arms."

When marching to the rear, the platoon commander places himself on the side toward the enemy as soon as the march is begun.

The new units created during the course of the battle remain as such until an opportunity offers which permits of "forming."

214. If during or after assembling the original units are again to be formed, the command: **(X) Platoon in line.....** Form is given. The skirmishers, without first forming subdivisions, resume their original places in line, behind the platoon commander.

d. COMPANY.

The Company Commander.

215. The company commander regulates the employment and the cooperation of the platoons. He decides which part of the company shall be deployed, and gives the necessary instructions to it and to the part remaining in close order. He selects the best position from which to direct the company.

216. If the company commander is on the firing line, he selects and designates the target and gives orders for opening fire. He announces the range found by the range finders and carefully watches the effect of fire. The fire control, however, he leaves to the platoon commanders, and only interferes when he desires to utilize the fire effect of several platoons or of the whole company, or when he believes that certain occurrences have escaped the observation of the platoon commanders.

The skirmish line.

217. The formation of a skirmish line, its movement and position, are regulated according to paragraphs 174 and 191.

The platoon commander gives the command for the deployments. (Exception, see paragraph 220.)

218. If several platoons deploy simultaneously, one of them must be designated as the base. As a rule the guide in each platoon is center. It is the duty of the commander to regulate the march of his platoon on the base platoon. When this becomes impossible, the platoons adjacent to the base change their guide from the base platoon to the flank squads.

219. If the company commander sees beforehand that he will have to employ several platoons simultaneously, he first causes them to take the proper interval, so that on deploying they will be in rear of the places they are to occupy.

220. To deploy the entire company simultaneously, the company commander commands: **The whole (X) company Deploy.** If the company is in line or in company column, it deploys on the center platoon. If it is in platoon, or in half-platoon column, or in column of squads, the leading platoon deploys at once, the rear platoons marching out to the right, and left and deploying from their outer flanks (paragraph 131).

If the company commander desires to deploy the company to one flank only, he commands: **The whole (X) company to the right (left) Deploy.**

221. The musicians of the company are used during the battle to maintain communication between the company commander and the platoon commanders. One of the musicians accompanies the company commander; the other three are assigned to the platoons. (NOTE.—The musicians must be trained in signaling.)

The support.

222. That part of the company which is held back is called the support. It serves either to extend the fighting front, to close up gaps to reenforce the firing line, or to cover the flanks. Its position is regulated in accordance with one or another of these requirements.

223. The distance of the support from the firing line depends on the nature of the ground and the tactical situation.

The timely reenforcement of the firing line is most essential. On that account the support must keep as close to the firing line as possible, but it must also avoid unnecessary losses.

Visual communication must be maintained between the support and firing line. On this account it may be necessary to establish intermediate posts from the support in broken or wooded country.

224. The support regulates its formation according to the nature of the ground and the effect of the enemy's fire. In country affording cover it may be led forward at attention and in close order. Over open country, swept by the enemy's fire, it will frequently have to advance in extended order and also by rushes. It may be divided into squads and may also utilize favorable ground by moving temporarily to a flank.

225. The commander of the support must observe the movements of and conditions existing at the firing line in order that he may support it to the best advantage. If it has been necessary to subdivide the support during the advance, it must be reunited as soon as possible.

226. The reenforcement of the firing line takes place by extending it or by putting men in the intervals. The units designated for this purpose deploy and place themselves in prolongation of one of the flanks of the firing line or move up between the skirmishers. The men on the firing line call out the range to the reenforcement.

It may also be the purpose of a reenforcement to push forward a firing line that has been brought to a standstill.

227. The reenforcing of the firing line must be regulated from the beginning by designating to the support the extent of front which it is to reenforce and the gaps which it is to fill. Crowding together of the skirmishers must not result from a reenforcement.

When the reenforcement reaches the firing line the skirmishers thereon must not be compelled to move to make room for it.

228. The company must be taught to form new units quickly. In doing this the platoon commanders and squad leaders distribute themselves along the front.

The training must be so thorough that even when new units are formed control of the men and well regulated fire control will be quickly regained.

Closing up; Assembling; Forming.

229. To close up, assemble, and form the company, the same principles apply as for the platoon (paragraphs 211-214)."

230. As a rule the company commander orders the assembly on one of the platoons. The platoons then assemble individually and form platoon column, but they may also combine the two movements. In executing these movements the shortest routes must always be taken.

231. If the company commander desires to assemble the whole company near himself, or on the march, behind himself, he commands **(X) company assemble, or Assemble, March, March.**

At this command officers and men direct their march on the company commander and, while gradually closing up into squads and platoons, form platoon column (paragraph 213). If units could not be formed in close order while advancing, they are so formed upon being assembled. New units are formed after the assembly has been completed. The platoons are placed in their proper order after being assembled.

232. To restore the original units, the command **(X) company in platoon column Form** is given.

Any other formation may be chosen.

2. THE BATTALION.

233. The battalion commander leads his troops by means of orders to his subordinate commanders. If he desires, in special cases, that the order refer to the battalion as a whole, he must so specify.

234. The companies may form one behind the other in platoon or company column; column of companies in company column (Pl. VI), or alongside of each other in line of companies, line of companies in company column (Pl. VII).

The positions of the leaders, intervals, and distances between companies can be changed as required.

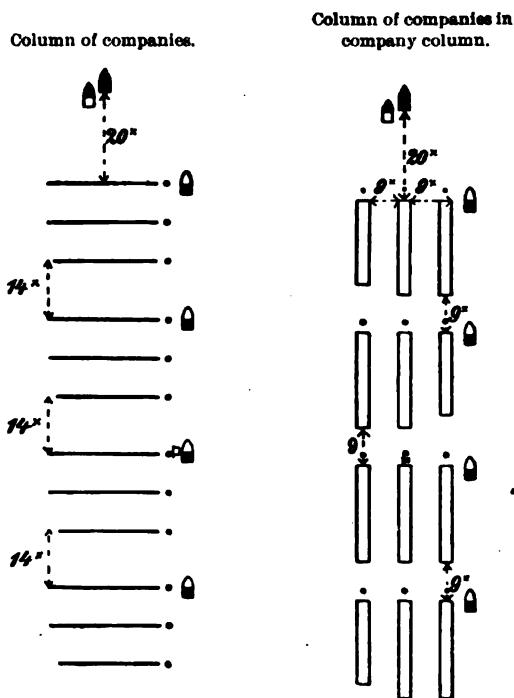
Column of companies is used in assembling, and together with the column of squads, for the marching column.

The line of companies is used (except at parades) at formations in which it is of importance to lessen the depth.

235. Any other formation is permissible when the purpose and space require it.

236. The color takes the positions indicated in plates 6 and 7, even when the third company of the battalion is not in the position shown. Two color-guard sergeants stand behind the color bearer.

PLATE VI.



KEY TO PLATES VI AND VII.

- ▲ Battalion commander.
- Company commander.
- Battalion adjutant.
- Platoon commander.

NOTE.—Superpumerary staff officers join only at parade.

When deploying for battle, the color remains with the company with which it happens to be. It goes on the firing line with the last platoon of that company. One squad must remain with the color under all circumstances.

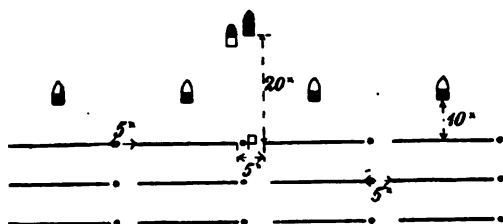
237. Guide and touch are toward the right when at a halt. When marching in column of companies, toward the right; in column of companies in company column, toward the center platoon; in line of companies and in line of companies in company column toward the color.

238. For parade purposes, the guide is taken on men posted as guides (noncommissioned officers). (Paragraph 99.)

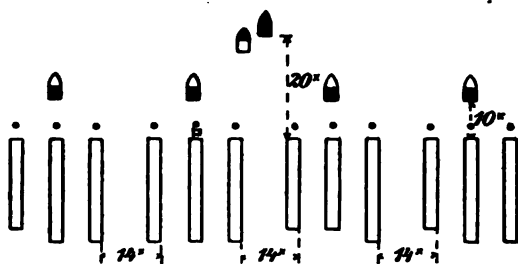
239. The movements of the battalion in close and extended order, as well as of the company in forming extended order in the battalion, take place at route step.

PLATE VII.

Line of companies.



Line of companies in company column.



On the battlefield attention is to be taken up as soon as it is necessary for the maintenance of order and discipline.

Cadence is required only within the company.

240. Movements and changes in the direction of march of the battalion in close order are executed according to the principles prescribed for the company.

At the command of the company commander, turns, when changing direction in column of companies, are executed on a moving pivot. (Paragraph 137.)

241. The formation of the battalion determines the methods for its extension.

The battalion commander determines the front, the base company upon which the extension is to be made, and its conduct. He then orders the additional arrangements. If the deployment is made from a halt, the distances are to be gained as soon as the battalion is put in march.

On the march the deployment is executed on the leading company, which then becomes the base.

From the marching column the deployment is executed most easily by changing the direction of march of the head of each company.

The companies proceed by the shortest routes. Companies on halting come to "the order" and then stand "at ease."

242. The movements of the battalion in extended order are regulated on the base company.

The character of the ground and the tactical situation may render it necessary for the company commanders to alter, temporarily, the intervals and distances. They select, on their own responsibility, the proper formations in executing the movements.

As the troops enter the fight, the importance of guiding on the base company gives way more and more to the requirements of the action.

243. The change of direction of a battalion in extended order is executed by indicating to the base company the new direction. The companies turn in the new direction and again resume their former relation to each other if the battalion commander does not order a new arrangement. This will generally require several changes.

244. The assembling of the battalion on the company designated by the battalion commander takes place by the shortest routes.

3. THE REGIMENT AND THE BRIGADE.

245. Regimental and brigade commanders lead their troops by means of orders transmitted to their subordinates.

246. In the regiment the battalion is formed in one or more lines. In the brigade the regiment is formed in units placed side by side and in successive lines, and also when necessary in well separated groups.

The formation, intervals and distances of the units, as well as the positions of the commanders, are regulated according to position, purpose, ground and space.

247. When neither the enemy nor the country need be considered, the battalions are arranged, as a rule, in column of companies with 30 paces interval and distance.

The regimental commander is 25 paces in front of the center of his regiment, the brigade commander 50 paces in front of the center of his brigade.

248. In assembling regiments and brigades the movements must be executed without one organization interfering with another. The joint relationship must be maintained while skillfully taking advantage of the character of the ground.

When necessary a base battalion must be designated.

249. The formation of regiments and brigades in extended order, the movements of the units, and the assembly take place according to the principles prescribed for the battalion.

It is generally necessary to point out to the units of the regiment and brigade in extended order the direction of march.

Part II.—THE COMBAT.

INTRODUCTION.

250. The regulations take into account the simple tactical relations which form the rule in time of war.

There are, however, cases for which general instructions can not be given. The leaders must therefore be trained to adapt their instructions quickly and without hesitation to individual cases.

251. In collective training the purpose kept in view is to develop the self-reliance of the leader and of the individual skirmisher. Battle exercises approach the reality if the unit concerned has opposed to it a unit which conducts itself as in war.

On this account exercises of troops against troops are most instructive.

(For indicated troops, see Field Service Regulations.)

252. In minor exercises umpires, by frequent criticisms on the manner of solution, supply the impressions and

influences of war which are wanting in peace, contribute to the development of independent action on the part of subordinates, and help to give these exercises a warlike character.

(For the duties of umpires at exercises with larger units, see Field Service Regulations.)

253. Maneuvers can not be conducted as slowly as actual battles. Too quick a course develops peace tactics which would find no application in war. Commanders and umpires, when necessary, must prevent too great a rapidity of execution.

254. The inclination to simplify matters by a recourse to measures impossible in war must be always resisted. The greater the number of difficulties to overcome the better will be the instruction, and the more will the worth of independent action be recognized and prized. The practice of forming predetermined plans of battle is forbidden.

255. The proper execution of maneuvers under service conditions depends on the choice of correct formations, while at the same time taking advantage of the nature of the ground. The greatest advantage must always be taken of conditions which favor the development of our fire while lessening that of the enemy.

256. The infantry must fight over any ground which can be crossed by a vigorous man, and must be able to overcome obstacles when fully equipped.

257. At maneuvers all leaders must give their orders from the places and in the positions that they would have to take in actual battle. This also applies to mounted leaders.

The commander may always personally deviate from this rule and may allow his subordinates to do so, if this should be required for the better training of the troops.

258. The principles governing the employment of infantry in battle are best taught by placing them in simple tactical situations. The most elementary exercise consists of a combat with one company on each side. It is the most frequent case in war and requires the most skillful use of ground.

259. Where the combat can not be carried out as a whole on account of too restricted a space it must be executed in phases.

260. Night exercises, with small or larger units, must be practiced. In this case the point is not so much to carry out

all the phases of a combat as it is to occupy a designated position in order and silence where there are no roads.

261. The use of fieldworks must be learned early. In case there is no suitable ground at the station of the troops to use intrenching tools, the maneuver grounds must be utilized for this purpose.

Where the peace-time conditions prohibit the building of fieldworks indicated by tactical conditions, the preparatory steps at least are to be taken and the work indicated.

262. At inspection the inspector sets the task; he tests the tactical training of the troops, particularly that of the leaders, and convinces himself that the subordinate officers properly apply the principles of fire direction and that the individual men act intelligently in the absence of fire direction.

263. All leaders must be specially trained to economize the strength of troops at every opportunity. This is essential in order that they may be able to exert themselves to the utmost when necessary, and at the same time to withstand great deprivations. Dissipation of strength lessens chance of victory; therefore each unnecessary step lessens the chance of success.

264. Infantry is the principal arm. In unison with the artillery, it overcomes the enemy with its fire. Alone, it breaks down the last resistance; it bears the main burden of the battle and suffers the greatest losses. For these reasons it also wins the greatest glory.

265. The infantry must cherish its inherent desire to take the offensive; its actions must be guided by one thought, viz, forward upon the enemy, cost what it may.

This requires a high moral standard in the troops. Firmly to establish and increase it is the essential purpose of peace training.

A well-trained, well-led, and resolute infantry which is strong in determination has a good chance of success, even under difficult conditions and against an enemy superior in numbers.

266. The officer is the model for his men; his example draws them forward. He maintains the strictest discipline and leads his men to victory even after stupendous exertions and heavy losses. He must be a faithful helper to his men and share

with them joy, sorrow, and deprivations, and thus gain their implicit confidence. In peace the officer must fit himself by thorough preparation for his important duty in war.

267. The noncommissioned officer assists his commander and must take his place when necessary. Upon his trustworthiness and loyalty rests the cohesion of the company.

268. The soldier must, after strenuous marches and privations, preserve in battle his courage, energy, judgment, and rapidity of decision. By means of gymnastic training and fencing men should be taught to think little of themselves, and to be audacious. They should be hardened to bodily fatigue and be familiar with the simple formations for combat. They must be taught that there is nothing more dangerous than to turn the back upon the enemy.

The soldier who, in the press of battle, feels that he is losing his determination and good judgment must look at his officers. If these have disappeared there will remain noncommissioned officers and brave soldiers whose example he can follow.

269. Each soldier must endeavor to remain with his detachment. An unwounded man who is found idle behind the fighting troops, or who, without express orders, carries wounded from the fight, or who leaves the battlefield under any pretext whatever, renders himself liable to be considered guilty of cowardice.

270. When a man becomes detached from his company he must join the nearest unit and obey the superior of that unit as he would his own. After the battle each soldier who has become detached from his unit must immediately search for it and give an account of his absence.

271. If, in battle, units have become mixed, order must be restored as soon as possible by the creation of new units.

LEADERSHIP.

272. Fixed rules for leadership which are of universal application can not be given. In each individual case the leader must be clear in his own mind as to the proper manner of conducting the combat and form his plans accordingly. These plans he must not abandon without cogent reasons.

273. If the actions of the commander are not fixed by the situation, or by orders, he must determine whether he will

fight an offensive, defensive, delaying, or any other sort of combat; or whether he will refuse battle by marching away. His orders must clearly express his intentions.

The commander must find ways and means to transmit his orders to his subordinate commanders even to those of the lowest rank.

274. In preparing orders for a battle the commander must not let preconceived ideas influence him, since no exact plan can be prescribed for a conflict.

Usually troops should be moved quickly in the desired direction by verbal orders. The more detailed instructions will come later. For the brigade and higher, these will generally be given in writing.

275. Superior commanders must limit their orders to those necessary. They must avoid going into details and leave to subordinate commanders the choice of methods. Their orders and instructions are to be addressed principally to the commanders immediately subordinate to them.

This must not prevent the commander from giving his orders directly to subordinate units where the conditions require it, where there is a lack of time, or where the conduct of a subordinate commander threatens to endanger the purpose of the fight. Such interference must immediately be communicated to intermediate commanders.

276. The initiative of subordinates must not degenerate into independence.

Independence within proper limits is the foundation of great success in war.

277. If there is a prospect of contact with the enemy on the advance, the post of the commander is as far to the front as possible, and usually with the leading divisions of the advance guard.

The commander moves to the front with the utmost dispatch, taking care to keep in communication with his troops. He dismounts at places which afford a good view and reconnoiters with the field glass. He thus gains information at first hand concerning the conditions of the enemy, the neighboring troops, and the terrain, which can not be furnished by communications, reports, or maps. Thus he will be in a position to give his first instructions properly, to gain an advan-

tage over the enemy by his prompt dispositions, to avoid marching his own troops by circuitous routes, and to prevent faulty dispositions on the part of subordinate officers.

The commanders of the subordinate units with whom he has to deal directly should be called to the front as opportunity offers.

278. To direct the fight the commander-in-chief should place himself far enough to the front to be able to see his troops and to be easily found himself. A view of the ground to the front and of the enemy, as well as good communication with the next higher command and with his subordinates, is desirable for a commander situated on the advanced line. Change of place deranges permanent communication and must not be undertaken without cause.

If the commander leaves his place, care must be taken that orders and reports intended for him are directed to his new position.

279. Commanders at the front must dismount under effective hostile fire and seek cover so far as is compatible with the requirements of observation.

Even the higher commanders and their staffs who are situated farther to the rear must conceal themselves from the enemy and will do well to dismount.

280. Definite distribution of the staff, assignment of different duties to individual officers, and the continued observation of the enemy, especially from elevated positions, are necessary. The commander's flag must not betray the position of the commander to the enemy, although it must be visible to his own troops whenever possible. It is most suitably placed on the main road of advance. From this point reports are forwarded to the commander.

281. Information as to the position of the enemy and as to the nature of the ground is a preliminary condition to the decisions of the commander.

Often the more detailed knowledge necessary to carry through the combat is furnished only after it has begun.

282. For rapid communication between the higher commanders, the telephone may be of great importance. In general, direct communication between the various commanders or their staffs will be established. (For delivery of orders and reports, see Field Service Regulations.)

283. The attention of all commanders must be directed to the maintenance of order, cohesion, and cooperation. The higher commanders must see to it that their troops do not get out of hand. Subordinate chiefs must endeavor to rejoin their commands quickly after accomplishing any mission. If this be impossible for want of time they should join the nearest higher commander and offer their services and that of their troops to attain the common end.

284. Commanders must be so sure of their troops that they can devote their whole attention to the combat. They should transmit important information to each other.

285. Although at the beginning of a battle care should be exercised not to put too many men in line, on the other hand there is no greater error than to employ too few and to sacrifice them by dribblets. One would continually have to fight against a superior force, voluntarily foregoing the advantage of superiority in numbers.

Not only does an unsuccessful undertaking entail unnecessary losses, but it also injures the morale of the troops.

286. The difficulty of changing the front of the firing line increases with the size of the units engaged.

Before the beginning of the battle, the front on which the fighting is to be done must be determined as exactly as possible. If the advance shows that an error has been made, it is usually only possible, with large units, to develop new lines on the correct front.

287. Extension and arrangement of troops depend on the objective, the terrain, and on the troops acting in concert. They will be various, depending on whether a body of troops fights in conjunction with others or alone; whether they are to fight on the offensive or defensive or only to occupy the enemy for a definite time.

288. Apart from one's own strength and intention, the extension of the enemy's front also will have some bearing on the initial extension of front.

Where a large front in battle must be occupied by a small force, fighting must be carried on by more or less detached groups.

That ground will, then, be taken advantage of which affords cover in the direction of the attack.

289. If there is protection on both flanks, the available space in the direction of depth determines the formation. Troops retained in the rear are needed, in this case, only for carrying on the frontal attack.

290. Troops protected on one flank are, of course, less restricted in extending their front, but will have to make dispositions in the direction of depth to protect the unsupported flank. This can be accomplished by pushing forward the units in rear in echelon. Distance and interval increase with the strength of the echelon.

291. Troops fighting independently are least restricted in the extension of front and the formation in the direction of the depth. They must, however, under certain circumstances, protect both flanks to guard against being surrounded.

292. The artillery forms the skeleton of the battle. On its position the grouping of the remainder of the field forces will, in a great degree, depend. For that reason the commander must reserve for himself the choice of the artillery position and indicate to the artillery commander what cooperation he expects from him.

293. The commander most effectually insures his control over the activity of the units engaged on the firing line by assigning definite tasks to them.

294. The commander possesses, in the forces not yet used, the reserve, the chief power to influence the whole course of the fight. With it he can change the decisive point of the battle to a desired position, assist wherever he thinks it necessary to reenforce, and finally can decide the issue.

The reserve must not be too weak; the splitting up of the units must be avoided as much as possible. In large commands even a part of the artillery may be placed in the reserve.

295. The position of the reserve depends on circumstances and ground. It will usually be where the decisive action is anticipated or desired.

If at the beginning of the battle conditions are still so uncertain that it is better to retain the reserve in rear of the center, care must be taken that when moving up on the flank of the firing line, it is not unduly exposed to the enemy's fire.

296. If the commander sees that the battle will have a successful issue, he must take timely measures for the pursuit that is to follow it. Victory should find the commander in the front line.

297. If a retreat must be made, all commanders must ordinarily remain with their troops in order to maintain cohesion and order. After the commander in chief has given the preliminary instructions and assured himself of their execution, he alone will ordinarily ride to the rear in order to prepare further measures for the retreat (par. 432).

298. Night fighting increases the difficulties of leadership, particularly with large units. It requires thorough preparation and the employment of the simplest formations. Chance plays a far greater rôle here than by day, but the stricter the discipline the less is its influence (pars. 386-390, 415-416).

299. If for want of cover the rear lines can not be withdrawn from the enemy's fire, the distance between them must be such that the sheaf of infantry fire or the shrapnel cone shall not include two lines at the same time (generally 300 meters). If it becomes absolutely necessary that a detachment in the rear be immediately moved up to the firing line, this consideration becomes of secondary importance.

300. Volley fire which takes the enemy by surprise may have a very demoralizing effect. The closer the range the more demoralizing it is.

301. An effective means of increasing the fighting power of troops is to lay aside the pack.

As soon as it becomes doubtful whether the troops will be able to perform the task assigned them in battle without such relief, all commanders of detached units, and, when not detached, commanders of regiments and higher units, are justified in ordering the removal of the pack. They, of course, realize the loss caused by leaving the pack behind.

Ammunition and iron rations are to be taken from the knapsacks. Overcoats, cooking utensils, canteens, bread bags, and intrenching tools remain with the men.

302. When the conditions of the fight permit, troops rest with stacked arms.

303. For the replenishing of ammunition, see Field Service Regulations.

304. The most valuable quality in a commander is the love of responsibility. This must not be held to mean that a commander should seek to accomplish personal projects independent of general considerations; that he should fail to obey orders scrupulously or that he should wish to do better than to obey.

But in cases in which it becomes evident to the subordinate that the commander has not been able to see the actual conditions, or where it is evident that events have rendered previous orders nonsensical, it becomes his duty to change or to disregard the orders received and to notify his superior accordingly. He will assume full responsibility for the nonexecution of his order.

A commander who freely shoulders responsibility will not shrink from using troops without hesitation, even when the issue of the battle is doubtful.

All commanders must continually realize and impress upon their subordinates the fact that omission and neglect are greater faults than blunders in the choice of means.

UTILIZATION OF THE GROUND.

305. Timely reconnaissance is a necessary preliminary to taking advantage of the ground. This must be executed carefully, but must not be so detailed as to retard the battle unnecessarily and thus place the issue in jeopardy.

Observation by the enemy must be rendered difficult on the advance and during the preparatory movements by a proper use of cover.

306. The desirability of adapting movements to the character of the ground while under fire must not be allowed to check the advance or to cause certain units to hang back, so that the attack finally breaks down.

307. The terrain has an essential influence on formations. Open ground involves greater distances in order to lessen the loss. Close country permits decreasing the distances. The commander must not fail to profit by the advantage afforded by close country, since it will often become possible in such country to reinforce the firing line rapidly. Closed formations can be retained longer on ground favorable to cover.

308. Level ground is unfavorable for attack. The defense

seeks it in order to make use of the advantage of a good field of fire.

309. Even on difficult ground the order and cohesion of the units must not be lost.

Every opportunity which the ground offers to restore order to the units must be utilized.

USE OF FIELD WORKS.

310. Artificial cover, obstacles, sham constructions, and masks, erected at the proper time and place, may render important service to the commander of the troops.

311. If conditions prove other than expected, the works already finished must not influence the actions of the commander. On the other hand, the consideration of the fact that works might be built unnecessarily must not cause their construction to be omitted altogether.

312. Deep trenches afford the best protection. When time is wanting, one must be satisfied with less cover.

313. During the attack, intrenching tools may be advantageously used in positions where troops must hold fast to what has been gained. However, it must not be forgotten that time is more beneficial to the defense than to the attack. As it is difficult to again push forward a firing line which has intrenched itself with great labor under an effective fire, the intrenching tools must be used with care in the attack.

Never must the desire for cover check the attack, nor possibly end all thought of attack.

314. The infantry must be exercised in the building of field-works without the aid of pioneers. All officers must understand how to choose suitable positions and how to direct this work.

ADVANCE INTO ACTION.

315. As the enemy is approached, the preparations for the battle must be completed.

Marching up, (Aufmarsch) development, (Entfaltung) and deploying (Entwicklung) must now be considered.

"Marching up" is the passage from the column of march into a broader formation of units in close order. It is used to shorten the depth of march and assemble.

“Development” is the establishment of a broader front by the breaking up of the column of march into several columns. The troops radiate out and can generally retain the marching formation. “Marching up” in long columns is only employed when there is no prospect of an immediate encounter. “Development” gives a better formation of troops in depth for use in battle.

“Development” can also take place from the assembling formation. In case one can foresee the necessity for beginning an action the “marching up” will be avoided, since it will generally involve loss of time and strength, and the “development” chosen instead.

“Deploying” is the arrangement of troops for battle in firing lines. As a rule it follows the “development,” but it can also take place immediately from the marching column or from the assembling formation.

316. On halting, the depth of march is reduced, either by forming close columns of companies (tief Kolonne) for the “marching up,” or if “development” is about to take place, by placing several marching columns side by side.

317. On roads of sufficient width it may be useful to shorten the marching column at the outset by the formation of double marching columns. (See Field Service Regulations.)

318. Whenever possible, when infantry halt, it must leave the road. If arms are stacked on the road, they are placed on one side; as wide a space as possible is left clear. Light baggage will generally be kept on the road.

319. When marching off the road, timely reconnoitering and the assignment of roads to the columns are necessary.

320. When the artillery goes forward, it must be ordered on which side it is to pass the infantry, in order to avoid the crossing of columns. If crossing can not be avoided, the infantry forms a broader front in masses, when it is obliged to halt; it then hastens while the artillery is taking position to pass through the gaps of the artillery column.

321. The position of the troops which are held in reserve is determined by the direction of advance and by the necessity for keeping them concealed from the enemy’s fire, and even from his sight, if possible.

Large units are held in well-separated groups.

322. For moving assembled masses, a deep column or several deep columns may be employed.

323. Each assembly must be covered according to necessity.

CONDUCT OF THE ATTACK.

324. The attack consists in firing on the enemy until close range is reached, if this is necessary. Victory is made complete by charging with fixed bayonet.

325. Within the zone allotted a unit for the attack, level tracts devoid of cover must be avoided as much as possible, or only small and well-extended forces must be ordered to advance over them, while the main body must be placed so that approach under cover is possible.

If this proves impossible, the decisive attack must be led across the open ground.

326. Every attack begins with the deployment of skirmishers. As a rule, the skirmish lines approach as close as possible to the enemy before opening fire, in order to be able to begin the battle with an effective fire. The point to which the advance can be made without opening fire is determined by the nature of the ground, the effectiveness of the fire of the enemy, and, above all, by the character of the troops. It is expected that well-trained infantry will not open fire, even on ground devoid of cover, until the mid-ranges are reached.

327. The desire to press forward continually and endeavor to surpass each other must animate all the units of the attacking force. Where further advance is impossible, the ground gained must be held at all hazards.

Troops driven back form front again at the latest as soon as they reach cover. Reenforcements carry the wavering troops forward again with them.

328. Continued communication between the leading units of the attacking force and the commanders at the rear is necessary.

The use of the telephone for this purpose is particularly valuable.

When cover is available, reports and orders can, under certain circumstances, be carried by mounted men. In other cases communication must be carried on by signaling.

329. During the infantry attack the artillery must, while

sufficiently engaging the opposing artillery, endeavor to concentrate their fire with destructive effect upon that part of the enemy's infantry position which is to be stormed.

330. The advance of infantry while the artillery duel is still in progress compels the enemy to show his troops and to expose them to effective artillery fire (paragraph 444).

331. Accompanying the infantry attack by single batteries up to short ranges increases the morale of the infantry and may prevent a repulse.

332. If the ground permits skirmishers to advance under cover until they reach effective range, dense skirmish lines must be "deployed" there.

333. Very often the defense will have so selected his position that the attack will have to pass over broad tracts devoid of cover. If this is the case, it will seldom be possible to reconnoiter the enemy's position sufficiently to warrant the employment of large forces with any certainty.

334. Over such ground the enemy's fire may compel the attack to advance in loose, unconnected firing units, which offer difficult targets. When these units have reached a suitable position, they usually await reinforcements before opening fire. Up to this time the skirmishers seek to conceal themselves from the view of the enemy.

335. When from this first firing position a highly concentrated fire has been delivered, then the advance toward the enemy begins, with mutual fire support, until storming distance is reached. Methods can not be prescribed for individual cases, as the character of the ground and conditions vary so widely. The infantry combat exhibits varied formations and scenes at the different points of the battlefield.

336. If any unit has an opportunity to advance—be it squad, section, platoon, or company—it is its duty to utilize it. This is generally indicated by the gaining of a temporary superiority of fire, which is shown by the abatement of the enemy's fire or by his shots passing overhead.

Regularity in the advance of units should be avoided. The only thing to be kept in view in advancing is to avoid interfering with the fire of neighboring units.

337. The length of the rushes depends on the enemy's fire

and the nature of the soil and the configuration of the ground. Long rushes are desirable in order to approach the enemy as quickly as possible.

Generally small units must content themselves with short rushes, as otherwise they would hinder the fire of those left lying behind. Rushes in small groups, therefore, retard the advance and are only to be used where the conditions demand it.

Rushes by units larger than the platoon make mutual fire support difficult. They are only to be used when the superiority of fire is plainly evident.

338. By the use of cover, some units will be able to advance more rapidly than others. It would, however, be a mistake to detain them. They must consider, however, whether their isolation will not ultimately compel them to retreat, and thus jeopardize the success of the attack.

339. The aim must be to seize quickly positions which may serve as points for continuing the attack. From these positions the advance of the adjacent units may be aided by active fire.

In such positions entrenchments may be useful. A part of the skirmishers cover those at work by their fire.

340. In very hilly country an opportunity will frequently occur to support the advance of the firing lines by firing over them from elevated positions in rear.

341. For carrying through the attack the firing line must be maintained at its full strength by reinforcements. The timely bringing up of supports, as well as the replenishment of ammunition, must be the continual care of the commander.

The rear lines are kept back at the beginning in order that they may not suffer unnecessary losses. They must advance as soon as the conditions of the attack require it, and must be available for decisive action under all circumstances.

342. Breathing spells, division into small units, and the employment of extended order will often be necessary during the advance. It must be borne in mind that to give up close order is an evil which may often be avoided, especially when the firing line has approached close to the enemy and has sufficiently cut down his fire. Units in close order must not expose themselves to effective fire.

343. When the firing line has succeeded in approaching the enemy's position and in sufficiently shaking him, the charge is begun.^a

344. Whether the order to charge originates on the firing line or whether the command to do so is given from the rear, depends on circumstances.

345. If the front line is convinced that the opportune moment has arrived, it must not hesitate to risk the charge. Notification of this determination is sent back by signals.

The units in rear must immediately form and hasten forward by the shortest line without regard to losses.

346. If a part of the attacking forces, situated on a flank or on an elevated position, can deliver effective fire, while the charge is in progress, on the position to be taken, it continues to fire even during the assault.

347. If the determination to charge proceeds from the commanders in rear, notice of this is given by ordering the signal "fix bayonet," which must be executed by all the units which are to take part in the charge.

At this signal the skirmishers increase their fire to the utmost. The units of the firing line which are still behind, work themselves forward as quickly as possible. All reinforcements in the rear hasten to the front as rapidly as possible.

348. When the front line is to form for the charge, all the buglers continuously sound the call "quick forward," all the drums are beaten, and all the units throw themselves with the greatest determination upon the enemy. It is a point of honor with the skirmishers not to permit themselves to be caught up with by the supports until they are breaking into the position. When immediately in front of the enemy they charge bayonet, and with hurrahs dash into the position.

349. Though the charge is to be executed as a whole, yet it must not be understood that the enemy's position is entered simultaneously by all the units. The latter is of secondary importance, and an attempt to accomplish it might result in delaying units that had a successful prospect of carrying

^a At maneuvers the distance from the enemy before charging is about 150 meters, provided the character of the ground or the umpire does not require some other distance.

through the charge, because others were still in the rear. The power of the attack would thereby suffer. All units which have once started must continue to advance without stopping.

350. If the charge has been successful and the enemy overthrown, it is an error to push more rifles into the captured position than can be brought into action.

Units in the rear must be halted in time, in order to employ them for some other purpose. Their commanders must therefore often act on their own initiative.

351. Preconcerted plans for attack are prohibited.

RENCOUNTER.

352. Uncertainty and lack of information concerning the enemy is the normal condition in war. During the movements preliminary to an engagement the opponents will frequently receive detailed knowledge of each other only when they come into direct contact. Thus the combat is really developed from the columns on the march.

353. Since the advance guard may have to overcome unforeseen resistance or to hold positions against a superior force, the assignment of artillery to the advance guard will often recommend itself. The senior commander with the advance guard may, when necessary, hold back the artillery at some designated point in order not to expose it to defeat by superior artillery.

354. At the beginning of the battle that commander will have the advantage who is the more ready to fight, for he will thus preserve his freedom of action.

355. At this time information gained concerning the enemy and the country has the greatest influence on the choice of the time, manner, and place for the engagement. If contact takes place before sufficient information can be obtained the general situation must decide whether the attack is to be made. If attack is decided on, quick action is in order.

The commander must then make his decisions without awaiting further information. He can assume that the enemy is no better prepared than himself.

356. To the advance guard falls the task of securing for the main body time and space to develop for battle. The com-

mander in chief gives the commander of the advance guard the necessary orders on this subject.

It is particularly important that the position selected for the artillery be made secure. Important points on the front and flanks, especially the commanding positions, must be quickly seized, if need be, by fighting.

357. The advance guard must not hesitate to deploy on a front greater than that for which the same number of men would be required to fight a serious battle. The artillery hastening up will quickly bring it relief.

358. Although the nature of the rencounter requires quick action, the commander can not give orders for the deployment of the main body and for the attack until the advance guard fight has cleared up the situation.

359. While as a rule the main body should be used as a whole, still, cases may occur in which the commander must throw into the battle without delay units of the main body as they arrive, in order to retain or make the best use of an advantage gained by the advance guard.

360. If the enemy has gained the advantage by being the better prepared for battle, it is necessary to delay the development. In order not to become outflanked at the outset and continually to fight against a superior number, the commander will avoid the main battle until he succeeds in developing sufficient troops.

It may even be advisable to cause the advance guard to fall back in order to save it from a destructive battle and in order to shorten the time to deploy.

361. It is desirable to begin the artillery battle approximately at the same time as the deployment of the infantry, in order that the enemy may remain in doubt as long as possible. This rule is to be disregarded, however, if the advance guard requires the support of the artillery in the performance of its task, or if an attempt is to be made to gain information respecting the enemy by means of artillery fire.

ATTACK ON AN ENEMY DEPLOYED FOR DEFENSE.

362. If the enemy resolves to act on the defensive, he practically gives up the advantage of freedom of action.

363. The assailant then has time to reconnoiter the enemy's position and to weigh all circumstances which favor the attack. He must not limit himself to reconnaissance by the cavalry and to observation through field glasses. Mounted officers and infantry officer's patrols, by a close approach to the enemy, must supplement and complete the information.

364. If the reconnaissance shows that an immediate attack promises no success, whether darkness can be utilized for getting up closer remains to be considered.

365. If the commander has gained an insight into the situation and thereupon decided upon the position his artillery is to occupy and what direction he will give his attack, he places his troops as close to the enemy's position as possible.

366. The approach to the preparatory position must take place under conditions of uncertainty. The unit leaders reconnoiter the roads of approach by riding ahead. As soon as the enemy's dispositions are known as well as possible the front for deployment is divided between the units and the strength of the reserve is determined.

367. The preparatory position should be without the zone of the enemy's effective fire and also concealed as much as possible from his sight. In country generally devoid of cover, even when the enemy's artillery will be neutralized by our own, the infantry must be put in the preparatory position at 3 kilometers or more from the enemy.

368. The artillery begins the battle as soon as it is ready for action. It thereby makes easier the advance of the infantry and assists in obtaining a clear knowledge of the situation of the enemy.

369. In order to coordinate the march of the units toward the preparatory position it is advisable to have them move from one depression to another, especially when the view is limited. It will thus be possible to avoid the premature arrival to within dangerous proximity to the enemy of units whose march has been favored by the character of the country, while others, who had farther to go or whose movement to the front was more difficult, are still a considerable distance to the rear. The commander must so arrange the disposition of the troops that no loss of time will ensue when they move up in this manner to the preparatory position.

370. Even when it is desirable that the whole line making the attack should open infantry fire as nearly simultaneously as possible, it is by no means necessary that all troops in the preparatory position should be at the same distance from the enemy. The units which have arrived nearest to the enemy's position on account of favorable country can then by their fire help those in rear to cross over exposed ground.

371. After the troops are in position, the commander gives the order for the attack. This order, in so far as this has not already been done in the instructions for the preparation, must indicate to the larger units the ground on which to deploy and the part of the enemy's position which each is to attack (assignment of fighting front). A unit may also be designated upon which the others are to regulate their movements, although they must not be fettered thereby in moving forward. (Guide of the battle.)

372. In proportioning the forces it must be borne in mind that one can scarcely be too strong for the attack. But the field of attack must not be overcrowded in such a way that after heavy losses have been made good, even considerable numbers can not find place for firing.

373. With regard to the space for deploying, it can be stated that the company on a war footing will occupy, while attacking, 150 meters at the most, and a brigade consisting of 6 battalions about 1,500 meters.^a

374. Although superiority of the artillery fire which prepares the infantry attack is to be striven for, still the carrying through of the infantry attack must not be made entirely dependent thereon. The paramount consideration is the situation as a whole.

ATTACK OF A FORTIFIED FIELD POSITION.

375. The attack of a position which is strengthened by all the resources of field fortification will frequently be possible only by night.

376. After the enemy's advanced troops have been, as far as possible, driven back to the main position, systematic reconnoitering and sketching of the enemy's position, and the selec-

^a At exercises with units on a peace footing the front required for deploying these units on a war footing will be retained approximately.

tion of methods of approach of artillery positions, should be done by daylight.

377. The attacking batteries, protected by troops in advance, begin the artillery combat as early in the day as possible. Heavy artillery is particularly effective. In order to attain uniformity in the artillery fire it will be advantageous to place the whole artillery under a single artillery commander. With sufficient support from the artillery the infantry will be able to approach nearer the enemy's position by day, and perhaps even be able to undertake the assault. Otherwise it is generally expedient to advance infantry at night.

378. Night attacks require particularly thorough preparation. Above all, the roads of approach and the line to be reached must be selected and wherever possible must be indicated by features of the terrain, such as bushes, clearly visible strips of bare ground, etc. Each unit must be exactly instructed concerning its direction of march, and this must not be changed in advancing; the leader must impress upon his mind the position of certain definite objects which are perceptible, even at night, and must, if necessary, use the compass. Trustworthy guides, light-colored signals, bright distinctive marks, such as white flags, white bands around the arm for our own troops, lanterns shaded on the side toward the enemy, are used to prevent fatal errors. Generally loading should be prohibited.

379. Thus the advance can be noiselessly made in a compact firing line with the support close behind. Firing is to be avoided, and the effect of the enemy's fire (if he should use artificial illumination), is to be diminished by occasionally throwing one's self on the ground.

For restoring order, short halts will be made, if necessary.

380. There is an advantage in selecting the position from which to open fire so close to the enemy that from it the assault can be made.

The troops must intrench themselves quickly in the position, or in case the ground is hard, provide cover with sand bags carried with them, and must prepare everything for fire action. Machine guns will be particularly useful.

381. While constructing cover the workmen must be ready at all times to fight. To guard a prepared position by par-

ticular detachments pushed forward is not expedient. Security must be gained by patrols.

382. The pioneers must try to clear away by night obstacles to approach.

383. The artillery continues the fire during the night and increases it to its greatest intensity at daybreak. Under cover of darkness individual batteries are brought up into positions previously selected nearer the enemy and open an unexpected fire at dawn. They will endeavor to destroy obstacles and will support the attack as long as possible.

384. Beginning at daybreak, the fire of the infantry and machine guns, in unison with the artillery, must keep the enemy behind his cover, so that the removal of obstacles may be completed and the assault made, if need be, after a nearer approach to the enemy's position.

Reconnaissance must decide whether or not scaling ladders and similar implements must be carried.

385. When storming is attempted at early dawn from the storming position taken during the night, without previous fire action on the part of the infantry, the issue depends on surprise and rapidity of execution.

386. If sufficient information has been gained by reconnaissance concerning the enemy's position, the kind and condition of the obstacles, and the roads to be taken by the storming parties, the assault may then be made, even at night.

Whether the storming parties shall first be assembled in a particular position, or shall assault in combination with other units which under the cover of darkness have approached the enemy's position, depends on circumstances.

Feigned attacks against other parts of the position may divert the attention of the enemy from the main attack.

387. The greatest silence, unity of advance, observance of the proper direction of march, and maintenance of contact between individual units are indispensable up to the time for the assault. The hand-to-hand encounter will decide the battle.

388. There are no definite formations prescribed for the assault. As far as possible, simple formations are recommended since complicated ones tend to cause confusion. The rear lines follow at the shortest distance; the flanks are pro-

tected by troops in echelon. The reserve must be kept so far to the rear that it will not become involved in the night action unless the commander so wishes.

389. The night attack will cause great disorder among the attacking troops even if successful. To restore the units quickly and to steady them the commander should promptly bring up troops which are still in good order.

390. The captured position must be immediately prepared for defense. Every means for ascertaining the direction of the enemy's counter attack in time and for resolutely repulsing it must be taken.

Generally the pursuit will be begun only at daybreak.

391. Before attacking a fortified position, the knapsack is laid aside and the men well provided with ammunition and provisions, since it is possible that the attack may extend through several days.

THE FLANK ATTACK.

392. The combination of the frontal and flank attack furnishes the best assurance of success. A preliminary condition for flanking is to hold the enemy to his own front. For this purpose a determined frontal attack is most effectual.

It must be borne in mind that the frontal attack may lead to a repulse if the flank can not be attacked in time. Therefore, if a frontal attack can not be undertaken with sufficient strength, or if for other reasons it must be omitted, a skillful delaying combat, or even a mere threat of attacking may render the flank attack feasible.

393. Flanking is most readily effected by beginning the movement while still at a considerable distance from the enemy.

It will be more difficult to execute with success if it is begun at the same time that the troops are deployed or when it is attempted by the reserves kept in rear. Flanking by the troops in the front line is possible only on particularly favorable ground, and is then generally accomplished by an extension of the firing line by the flank.

In certain cases night can be utilized for such movements.

394. Since the flanking troops must advance at an angle with the main front, an interval must be maintained between

them from the start. This interval must be so great that the two inner flanks shall not overlap during the attack.

395. If the flanking troops have penetrated into the enemy's position, the greatest success is usually attained by rolling up the enemy's front.

396. Simultaneous flanking of both of the enemy's wings presupposes great superiority. Otherwise it will be detrimental to the attack because of the division of strength.

DEFENSE.

397. On its front infantry on the defensive is very strong when making good use of its firearms and requires relatively few men as compared to the attack. Its weakness lies on its flanks, unless these are secured by the nature of the ground or by other troops.

398. A pure defensive confines itself to maintaining the occupied position. A defense which desires not only to repulse an attack but also to bring about a decisive victory, must be prepared to act offensively.

399. The only position which is of value is one which compels the enemy to attack, which gains time for the defense by compelling flank attacks, or makes conditions favorable for offensive action on the part of the defense.

400. A position advantageous in all respects seldom exists; especially is this the case if it covers a large front. Suitable distribution of troops must compensate for the deficiencies.

The chief requirements are a free and broad field of fire, freedom of communication in and behind the position, and sure support for at least one flank.

401. The employment of artillery must be the consideration in the choice of the position. It must be able to concentrate its fire upon the probable direction of attack and to withstand the enemy's infantry attack until they reach close range.

The infantry position must be at a suitable distance in advance of that of the artillery. It is desirable to have this distance about 600 meters (paragraph 444).

A good field of fire for the infantry is also required up to close range. Where the nature of the ground does not permit of this, the frontal fire must be supplemented by flank fire.

402. The commander divides the position into sections, which are assigned to the various units.

The width of a section depends upon the nature of the ground. When the field is favorable for fire it can be increased. Few rifles but plenty of ammunition are then required.

This is not the case where, on account of a poor field of fire, it is possible for the enemy to approach to close range under cover. In the latter case the width of the sections must be small and must be strongly occupied. Each occupied section has its own reserve.

403. In order that all parts of the foreground may be observed and no portion of the enemy unexposed to fire, a division of the foreground corresponding to the sectional division must be made when necessary.

404. The method of preparing the position for defense depends upon the time available. The commander must make complete plans for his defensive works and assign to each unit its part in the labor. Generally, each unit prepares the defenses for its own section. The troops which are not assigned to sections are employed in the sections where important works are to be constructed.

405. At the same time that the defensive works are constructed of the field of fire is cleared and the ranges are determined. Provision for rapid communication must be made by the use of the telephone and by visual signaling.

406. Fieldworks lose a great deal of their value if they are so constructed that the enemy can easily discover their position by reconnaissance.

The enemy must be prevented from reconnoitering as long as possible. Often patrols sent out to the front suffice for this.

407. As a rule, but one defensive position is selected and this strengthened by all the means available.

Advanced positions may interfere with the fire of the main position and so frequently lead to partial defeats. Feigned positions may be prepared in advance of the main position when it is desirable to gain time. They are then to be occupied with but few men, who retire without fighting, if possible, after the enemy has deployed.

408. Defenses are not as a rule to be constructed in a continuous line, but in groups. Gaps between the individual groups are not detrimental, if the ground in front of them can be effectively swept by fire. When large units are employed, the use of the battalion group is the rule. Machine guns on the flanks of the groups may be of value.

409. The greater the number of men saved by means of suitable fortification and by skillful distribution of troops, the greater will be the number available for the main reserve. The prospect of a decisive victory will therefore be increased.

410. The main reserve must be kept ready in the most favorable position for meeting the enemy's probable attack and for taking advantage of the ground.

If fighting is not to take place on both flanks, the main reserve, as a rule, will be placed in echelon behind the protected flank. If both flanks are unprotected, the only course is to place behind one flank a reserve sufficiently strong to prevent the enemy turning it and behind the other the strongest force possible in order that it may be used at the decisive stage of the action.

The main reserve, in echelon, must have room for deploying, in order to prevent outflanking by the enemy or for use in counter attack.

411. Moving the troops into position too early discloses them prematurely; to do so too late may cause unnecessary losses. It is not always advisable to occupy the whole position at the same time.

412. Supports and section reserves must be ready at the proper time to repulse the enemy's attack. They are to be kept as near the firing line as the enemy's fire permits. If the ground does not afford protection, cover and covered roads of approach must be constructed.

413. If the defense has an ample supply of ammunition, it will open infantry fire even at long ranges if suitable targets offer themselves. If the advance of the enemy takes place over broad tracts devoid of cover, in loose, irregular skirmish formation, the defense will cover with volley fire the ground over which the opponent must pass. If the place where the enemy is forming his firing lines can be ascertained, the

defense directs his fire upon that point in order to overwhelm the enemy by superiority of fire.

It must always be borne in mind that an ample supply of ammunition is necessary during the entire fight.

414. The defense will only venture to make a counter attack in front of the position after an assault has been repulsed and full advantage has been taken of fire action, or to take an important position which the enemy has seized. A premature counter attack may lead to the loss of the position.

If the main reserve has been placed in echelon for the purpose of attacking the enemy's flank, it does so when the enemy's frontal attack is in full swing.

415. If the defense apprehends a night attack, preparations must be made while it is still daylight by determining the number of rifles required to sweep the field of probable attack and by the construction of necessary obstacles. If possible, artificial illumination should be provided for.

416. After dark every precaution must be taken to discover the enemy's approach and to provide against surprise. Reenforced patrols, illumination of the foreground from time to time, the utmost silence in order to hear every noise from the enemy will be the usual means taken. With the exception of the commanders, the observers, and a small force on the firingline, the troops in the position may rest. If the enemy's approach is perceived, the firing position will be rapidly occupied in force. Fire is not opened except at close range. The units in rear must be close at hand in order to drive out with the bayonet any of the enemy who may possibly have forced an entrance into the position.

DELAYING ACTION.

417. An action may be prolonged in order to gain time. Particularly is this the case in large units for the detachment opposing a turning movement. Similarly a delaying combat may be useful to engage the enemy until the attack of an adjacent column or flanking unit becomes effective.

418. In conducting a delaying combat the commander should employ strong artillery fire at long ranges. This is the best method of delaying the decision.

419. The infantry conducts the battle at long ranges with a widely extended firing line and holds far in rear the support and reserves. The line must be heavily reenforced and the troops in rear brought up only in case the battle assumes a purely defensive character, or the commander decides to make an attack.

420. Feigned engagements are employed to deceive the enemy concerning one's real intention. Such engagements may also be conducted offensively. The regulations do not prescribe particular rules for them nor for other still more unusual kinds of combat. The manner of conducting them will change according to circumstances.

PURSUIT.

421. Merely to overthrow the enemy is to achieve but half a victory. It must be completed by the pursuit the aim of which is the destruction of the enemy. Without vigorous pursuit, the beaten enemy will soon be prepared for renewed resistance which will have to be broken down by another fight.

422. The defeat of the enemy must be turned into complete rout by fire action and the most vigorous pursuit. If the retreating foe offers a good target, he must be fired upon. If he withdraws himself from fire, every endeavor must be made to close in upon him again in order to renew the attack with artillery and infantry fire or with the bayonet.

423. At the outset cavalry and infantry units on the flanks must take up the pursuit in a direction parallel to the retreating foe in order to reach the enemy's flank and rear.

424. Tireless pursuit calls for all the energies of the commanders. Even among victorious troops exhaustion becomes noticeable, and nature demands her dues from both high and low. Only the possessor of a strong will can overcome his own exhaustion and carry his subordinates along.

At such a time the commander must require almost impossibilities and must not be deterred from using rigorous measures even toward his own troops. Those who break down must be left behind. This sacrifice must no more lead to abating the pursuit, than losses in the previous fight would have caused giving up the purposes of the battle.

425. If the pursuit follows a successful attack, timely measures must be taken to secure what has been gained. The commander causes the troops who were most disorganized by the preceding combat to occupy the conquered position and reorganizes the units.

RETREAT, CESSATION OF THE COMBAT.

426. When the battle takes an unfavorable course, the commander must make up his mind in time whether he will retreat or continue the struggle.

427. The preparation for the retreat will be facilitated if the troops still retain their formation in the direction of depth. It would be an error, however, to keep a reserve to cover the retreat instead of employing it to assure the victory.

428. The method of conducting the retreat is determined by the condition of one's own troops and by the attitude of the victorious enemy. Beaten infantry can retreat only in a direction practically perpendicular to the front and in the formation in which it finds itself. It now needs all the assistance which the other arms can give it. To this end the artillery, while disregarding the hostile guns, must direct its fire upon the enemy's advancing infantry, even at the risk of the loss of its guns. The cavalry also, in order to enable the infantry to escape from the enemy, must sacrifice itself, even if the only result is a short gain of time.

429. Troops covering the retreat should occupy a defensible position, behind which the retreating forces may find time and space for reforming. It is most advantageous if they are sufficient for the purpose to employ only artillery and machine guns, protected by cavalry, while the infantry uninterruptedly continues its retreat. The mounted arms follow later at an accelerated pace.

A defensive position on the flank a short distance from the line of retreat is often advantageous.

430. During the course of the retreat it must be the endeavor to increase the distance of our firing line from that of the enemy. It is therefore wrong for individual units to become seriously engaged without cogent reasons, because it will then be difficult for them to break off the action.

431. As the distance from the enemy increases, it will become possible for the retreating troops to take up the marching formation and to throw out a rear guard.

The formation of several marching columns facilitates the retreat. Each column then supplies its own rear guard. Premature formation into a single column is to be avoided.

432. The commander in chief must conduct the retreat in accordance with a well-ordered plan. He must designate the position for defense and the troops to occupy it, and indicate to the individual columns their direction of march. Only after he has given these instructions and has made sure of their execution does he leave the battlefield in order that he may the better direct the progress of the retreat. The carrying out of the details is left to subordinate commanders (par. 297).

433. The cessation of the battle, whether it takes place by order of the commander or by direction of higher authority, is most easily accomplished after a success.

The more successfully such intention is veiled the sooner will it be possible to carry it out, and it becomes more difficult, the farther the action of the battle has advanced.

VILLAGE AND FOREST FIGHTING.

434. Whether a village shall be included in the line of defense or be used by the troops as a detached post depends on its position and character.

Strongly built and well-defended towns may become the foci of the battle. Still, care must be taken not to place too strong a force in a town.

435. The firing line will very often not coincide with the edge of the town. If time is available, defensive works are constructed. Fire from the upper stories of the houses may be useful.

436. If the enemy breaks into the town, every street and every inclosure must be defended.

The reserve must drive out with the bayonet the enemy who has forced his way into the town.

437. In the attack strong forces are sent along the sides of the village. The artillery preparation for storming a town must be thorough; a plunging fire is desirable.

438. If the outskirts of the town have been taken, the detachments who entered endeavor to follow close on the heels of the enemy and with the bayonet clear the way to the farther side of the town. In doing this they must keep off the streets and work their way through the gardens and yards. Small detachments are detailed to capture those premises which are still held by the enemy.

439. As soon as the other side of the town is reached preparations for defense must be begun.

Individual detachments desirous of pursuing the enemy must be prevented from going astray.

440. When fighting in the woods, particularly when they are extensive, it is difficult to maintain communication. Roads and fences facilitate the finding of one's way, and in thick woods offer units the only possible means of maintaining direction.

441. The defense must avoid deploying skirmishers as much as possible in the outskirts of the woods where they can be easily seen. In open woods the defense retires from the edge, but not so far that its fire is impeded by the trees. Skirmishers may be placed in advance of the front of the wood.

If the attack succeeds in forcing an entrance into the woods, the defense must endeavor to expel him by counter attacks, especially against the flanks. These attacks against the flanks are to be made with energy when fighting in the interior of the woods.

Large open spaces permit a stubborn defense, on successive lines of resistance.

442. The attack will turn his principal attention toward the salient points of the woods. If he succeeds in forcing an entrance, immediate restoration of order and formation is indispensable. Further advance takes place in compact skirmish lines not having too great a front, whose supports follow close in rear in close order and whose flanks are protected by reserves in echelon.

In woods not having great depth the attack is pushed through to the farther side.

ACTION IN COMBINATION WITH THE OTHER ARMS.

443. Infantry will seldom be so placed that it must carry on the combat alone. Generally it will fight in combination with the other arms.

444. In battle the activity of the infantry and of the artillery must be exercised conjointly.

The artillery protects the infantry at the beginning of the battle, which is then continued by both arms.

It is undesirable to have the infantry and artillery conduct the battle on the same line. The position of the infantry in battle must, as a rule, be so far in front of the artillery that the latter will be protected against the effective infantry fire of the enemy and that the infantry will not suffer losses from shots aimed at the artillery.

445. In order not to unnecessarily impede the fire of the artillery, the infantry when advancing passes around its flanks or utilizes the intervals generally available in the long lines of artillery. But if passing through the artillery line can not be avoided, at least all artillery fire should not be prevented at the same time but only that of certain parts of the line. Therefore it is advisable to hasten through in extended order or in column of squads. About 300 meters in front of the artillery, infantry does not impede its fire, even in flat country.

446. The infantry must accustom itself to being fired over by artillery. In an attack on an enemy's position the infantry should recognize that it is the duty of the artillery to direct its fire upon the points to be attacked until just before the charge.

Under unfavorable conditions for observation, the artillery fire upon the enemy's infantry will have to be discontinued when our front line has approached to within about 300 meters of the enemy.

The artillery then transfers its fire to the ground in rear of the enemy's firing line in order to impede the bringing up of the reserve.

447. Unbroken communication of the artillery with the firing line must be provided for. For this purpose the artillery usually sends officers to the front, who communicate

with it by signals. It is most important to ascertain how far our own firing lines are from the enemy, in order that the artillery may continue its fire as long as possible.

448. The infantry is obliged, without orders, to protect the artillery situated near it. The flanks and rear of artillery positions are most exposed to daring attacks by small detachments of the enemy. On ground affording good view the artillery protects its front by its own fire.

In long artillery lines only a few infantry are necessary to protect the front from possible molestation by hostile patrols. For this purpose small detachments at considerable intervals suffice.

449. In the combat against artillery attention must be paid to the fact that the superiority of fire of this weapon is at long ranges. Only at about 1,000 meters are conditions equalized, and at nearer ranges the infantry gains the superiority. Fire upon artillery is particularly profitable when it is going into battery, bringing up its advance train when it is moving, or when it offers a large target in any other manner, as is also a flanking fire on the cannoneers who are without flank protection and on the elements in rear. But never must infantry regard it as their task to replace artillery fire at long ranges or to vie with it. Such a tendency leads to waste of ammunition.

450. Changing the manner and direction of moving, as well as the employment of loose, irregular firing lines, makes it difficult for the enemy's artillery to get the range.

451. In fighting against cavalry, infantry, if prepared for fire action, must realize that it need not fear even a great superiority of numbers. For repulsing cavalry any formation is suitable which permits of the employment of effective fire. Firing lines against which a cavalry attack is directed suffer scarcely any losses worth mentioning. The enemy's cavalry will be satisfied, if it can cause the infantry to change its formation and delay its movements. Therefore only infantry detachments immediately threatened by cavalry should engage it.

452. Small forces of infantry may direct their fire upon dismounted cavalry with a prospect of being successful. Firing upon the led horses is particularly effective.

453. Machine guns, since they offer a difficult target and inflict losses upon the infantry even at long ranges, must be attacked at close ranges wherever possible. Narrow defiles, especially streets, which machine guns can sweep by their fire, must not be traversed by troops in close formations.

UNITS IN ACTION.

454. The smaller the unit the more seldom will it be placed in circumstances which require it to carry on an independent action; even the brigade will generally fight supported by other troops. Within prescribed limits, however, the independence of the individual unit down to and including the company is large.

455. Events will often render nonsensical orders coming from the rear. Timely action is frequently made possible only by the independent decisions of subordinate commanders. The chiefs of smaller units must bear in mind, however, that they are to perform their tasks in the combat in accordance with the plans of the commander in chief.

456. In battle uniformity of formation must not be insisted on. Each commander on his own responsibility chooses the most suitable formation.

COMPANY IN ACTION.

457. When preparing for the action the company commander rides ahead and selects the most suitable road for advance. This action supplements information concerning the country and the enemy.

458. When the company commander separates himself so far from his company that he can no longer personally command it, the senior officer present assumes command.

The company commander must return to his company as soon as it is evident that there is danger of considerable loss.

459. While taking advantage of the ground, that formation must be chosen which will allow the commander to keep his company in hand.

Column of squads is the most suitable marching formation. It must be recollected, however, that deploying from column

of squads requires more time than from some other formations. The company column with variable intervals permits the platoon commanders to take full advantage of the ground, and is especially applicable when it becomes necessary to deploy rapidly on an extensive front. Platoon, column and line formations best secure the cohesion of the troops and require little depth for concealing their dispositions.

460. The company in close order must secure itself on the battlefield by throwing out a weak skirmish line, on an exposed flank, if the flank be not guarded by separate detachments.

461. The number and manner of deploying the skirmishers depend on the available space and the purpose of the combat.

When attacking, compact firing lines must be deployed at the outset, if the firing position affords cover or can be reached by quickly passing over short distances.

If broad, fire-swept zones must be crossed before firing can be begun, if the conditions are not yet clear, or if a delaying combat is to be conducted, a deployment in loose skirmish lines must be adopted.

462. A company, entirely deployed at the outset, must be reenforced by men from other organizations to maintain its volume of fire. It is therefore committed to the undesirable mixing up of units from the beginning. However, the company commander must not hesitate to employ the full strength of the company at the very beginning, if conditions demand it.

463. In the attack a company supported on both sides will seldom be able to deploy more than $1\frac{1}{2}$ to 2 platoons at the same time on the space allotted to it. Reenforcement of the firing line will therefore usually take place by filling up of gaps.

464. A company supported on one flank only, and especially a company fighting alone, should avoid reenforcing by the above-mentioned method and thus prevent intermingling the platoons. The company acting alone must continually watch its flanks.

465. If firing lines are to occupy a defensive position, it is usual to first outline the position by means of the platoon and squad leaders. Timely occupation of a position is guaranteed by a few observers left in the position.

BATTALION IN ACTION.

466. Generally from the marching column, before going into action, a development, suitable to the nature of the ground, will be made. This, on account of its greater extent of front, prepares the way for deploying, and, in case of an unexpected encounter with the enemy, secures a better preparation for the battle.

467. If time is available, small stratagems may be resorted to, as, for example, in the extension of the companies on the main line, if by this means the enemy is prevented from observing the preparations.

468. Before going into action the battalion commander must communicate his orders to his company commanders, if possible, in the presence of all of them.

469. If the battalion is carrying on a decisive action within a larger unit, it is recommended to push forward several companies side by side at the same time in order to prevent, as far as possible, the mixing up of the companies.

If a battalion is acting alone, it is advisable to employ entire companies one after the other in order to have at disposal complete fighting units for further duties.

THE REGIMENT AND BRIGADE IN ACTION.

470. The regiment, on account of its history, its uniformity of training, the esprit de corps of its officers, and its division into three battalions—thereby simplifying subdivision—is eminently suited to the purposes of battle.

471. Seldom has the brigade, at the outset, the advantage of being divided into three parts. When separating a reserve from it, therefore, the breaking up of a unit can frequently not be avoided.

472. As a rule, when a regiment or brigade is deployed a definite task should be assigned to each subordinate unit. What was stated in paragraph 467 also applies here.

473. The larger the command, the more must the intermingling of units be avoided. The intermingling of parts of different regiments is particularly detrimental. It is therefore generally recommended to place regiments side by side.

Still the time, which the marching up and development of a brigade on a war footing requires (half an hour from the marching column), may have a decisive influence on the manner of its use.

FIGHT OF INFANTRY IN LARGER UNITS.

474. In an engagement the action of infantry should not become independent of the action of tactical units.

475. Unity of action is secured by the orders to the higher commanders, the sharp demarcation of the fields of action of the various commands, as well as by the combined action of adjacent tactical units. Undivided cooperation is, however, only possible when the subordinate officers never lose sight of the common purpose of the combat.

CONCLUDING REMARKS.

476. Simplicity of formations and the principles of the regulations must form the basis for thoroughness in training.

Careful observance of the principles of the regulations assures uniform training of the infantry of the whole army. Simplicity is a guaranty that the men called to the colors on mobilization will again accustom themselves to service in the shortest space of time.

477. The troops will be equal to all the tasks required in war if they have acquired a practical knowledge of the principles of the regulations.

Their training will have been good if they can do what war requires of them, and if, in battle, they are called upon to reject nothing that they have learned in peace.

Part III.—PARADE, ESCORT OF THE COLOR, HONORS.**1. THE PARADE.****IN GENERAL.**

478. Alignment and dress at parade formation and review are to the right. In parade formation all the files of a column cover.

479. If more than one company of a battalion is present at parade, the battalion commander takes command. If the companies are from different battalions, the senior battalion commander commands. In higher units special instructions are given by the commander.

Large bodies of troops and troops of different arms of the service are arranged one behind the other (echelon) according to necessity, and the conditions of command are specially regulated.

480. The commander of an independent division of troops acts in the same manner as a regimental commander.

481. Officers who are on parade or in command draw the sword.

482. All the other superior officers stand on the right (left) flank of their troops, according as the reviewing officer approaches from the right or left, but do not draw sword. They accompany the reviewing officer along the front of their troops on his outer side and are arranged according to seniority.

At the first march past they accompany, without staff, the troops, one pace to the right and on the side of the line of march, the senior being on a line with the front rank of the band, the others following according to rank. They salute by touching the headdress with the hand, and place themselves on the right of the reviewing officer, passing in rear of him.

The commander of a division accompanies the troops under him on the march past if they are assigned to lines not commanded by him.

483. Adjutants and staff officers of higher commanders present at the parade (from brigade commander upward) stand behind their commanders. If the front is ridden from

the right, they follow their commanders. (Exception, paragraph 502.) If from the left they remain at the right.

484. Spectators stand at the right wing, to the right and alongside of the immediate commanders. They form several ranks according to rank and number, and may close on the suite of the reviewing officer. (Exception, paragraph 502.)

485. If the reviewing officer is on foot, all mounted officers must dismount in the parade formation and on the march past.

486. In parade formation the following intervals are taken:

| | Paces. |
|------------------------|--------|
| For a battalion | 20 |
| For a regiment | 40 |
| For a brigade..... | 50 |
| For a division | 60 |
| For an army corps..... | 90 |

If space is lacking the intervals may be lessened; provided, however, that the commanders and bands are allowed sufficient room.

487. As soon as the reviewing officer approaches, the commander gives the command for all to present arms. He then goes to the right, or if the superior approaches from the left, to the left wing, and reports. If the commander is mounted he lets his sword hang from the sword knot around his right wrist.

While riding along the front he accompanies the reviewing officer on the outer side with sword lowered, places himself, according to his rank, among the commanders mentioned in paragraph 482, then goes in front of the troops and gives the signal to cease playing.

488. The reviewing officer causes the line of march to be marked by two adjutants (guide officers).

489. The commander salutes, in passing, when opposite the first guide (officer). In like manner all the generals, staff officers, and company commanders present at the parade salute, the latter, however, only when in front of their organizations.

490. When marching past, the commander continues straight ahead—at a walk—up to the second guide (officer), then, with lowered sword, turns out to the right—at a gallop when mounted—and places himself to the right and somewhat to

the rear of the reviewing officer. Here he remains, with sword lowered, until all have marched by. (Plate X.)

Similarly, all officers exercising command at the parade, from regimental commander (commander of independent unit) upward, turn out to the right. They take their places to the right of the reviewing officer, closing in according to rank. (Exception, paragraph 502.)

The staff officers of the commanders leaving the column continue straight ahead until beyond the second guide (officer).

The platoon commanders on the right wing (color bearers or right guides) are directed on the guides (officers). They take exactly the direction designated by the guides.

The platoon (company) situated alongside the color (colors) must move one file (two files) to the left at review.

491. At review the distance between units is, without regard to the number of files, as follows:

| | Paces. |
|--|--------|
| Between the platoons and companies | 22 |
| Between the battalions..... | 40 |
| Between the regiments..... | 80 |
| Between the columns of regiments..... | 100 |
| Between the brigades..... | 100 |
| Between the divisions..... | 120 |
| Between the army corps | 150 |

The rear battalions (at review in regimental column, the regiments) move up, in mass formation, to the starting point, at the command of their leader. (Plate X.)

492. Colors and standards, as well as officers belonging to the noble Order of the Black Eagle, when marching past or accompanying the review, are saluted by the officers at the reviewing point and by the guides, by touching the headdress with the hand.

PARADE FORMATION.

[Plate VIII.]

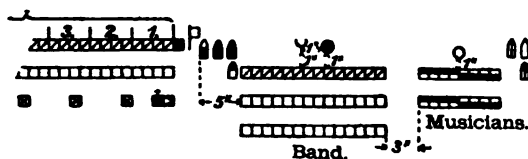
493. The company is in line, with its platoons numbered from the right flank.

494. The battalion is in line of companies according to Plate VII, unless a different formation is ordered. Supernumerary staff officers and the adjutant remain on the right flank even when the commander goes to the left flank at **Eyes . . . left**. The company commanders, the adjutant, and the musicians take their places at **Form for parade**.

PLATE VIII.

First Company.
First Platoon.

Parade formation.



NOTES.

1. If the company is alone on parade the battalion staff is to the right and alongside of the musicians.

2. At parade formation the colors are on the right flank of the leading platoon in platoon column and column of companies, and at the middle of the battalion in line of companies.

3. If the band is absent, there is an interval of 5 paces between the musicians and the right wing.

○ Regimental commander.

■ First sergeant.

○ Lieutenant-colonel with staff.

■ File closer.

■ Battalion commander.

□ Right guide (N. C. O.).

■ Supernumerary staff officers.

□ Left guide (N. C. O.).

■ Company commander.

□ Color bearer.

■ Regimental adjutant..

□ Man in the front rank.

■ Battalion adjutant.

□ Man in the rear rank.

■ First lieutenant or second lieutenant.

□ Bugler.

Y Bell-tree bearer (Schellenbaumträger).

■ Drummer.

● Bandmaster.

○ Battalion drummer.

495. The battalions of the regiment stand alongside of one another in line of companies or column of companies, the platoons and companies in the latter case having 5 paces distance between them. If "eyes left" is given, only the regimental commander goes to the left flank.

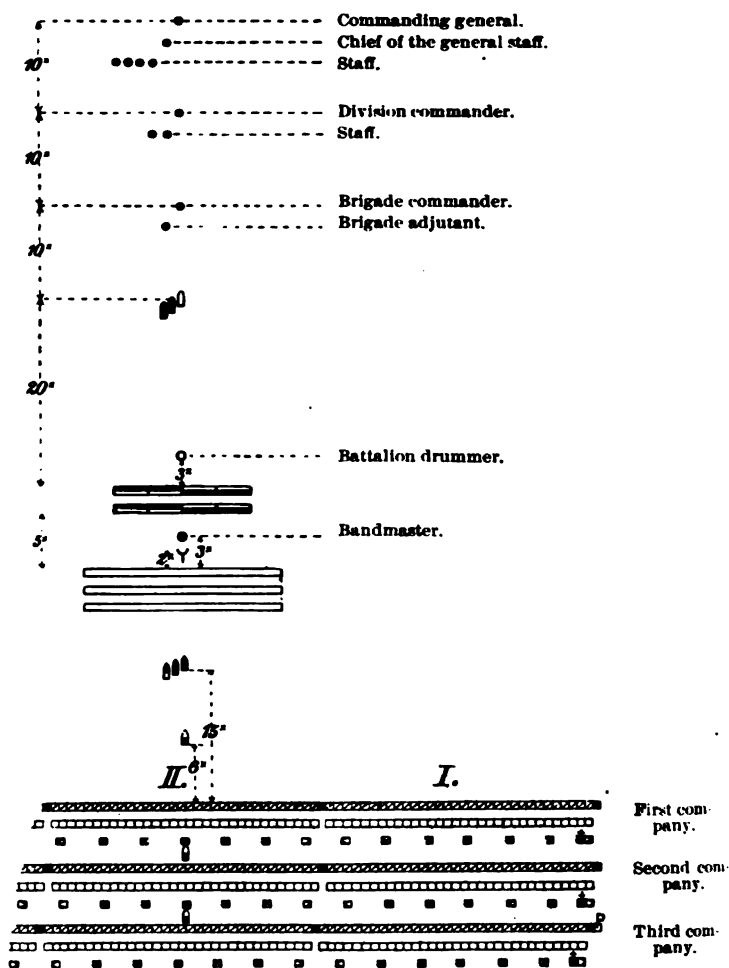
When the reviewing officer has passed one battalion and arrived at the head of the next, the commander of the first battalion rides in front of his command and gives the signal to his musicians (the band) to cease playing. He then brings the battalion to the "shoulder arms" and moves it up to the place provided for the review.

496. The regiments of the brigade stand alongside of one another, with their battalions in line of companies or in column of companies. As soon as the reviewing officer has arrived at the right (left) flank of the parade formation, the commanders of the remaining regiments cause them to come to shoulder arms. When the reviewing officer approaches, they cause the present arms to be given the second time.

THE MARCH PAST.

497. The march past is executed in platoons, company front, platoon columns, and with a regiment or brigade, also in regimental column. The battalion commander gives the com-

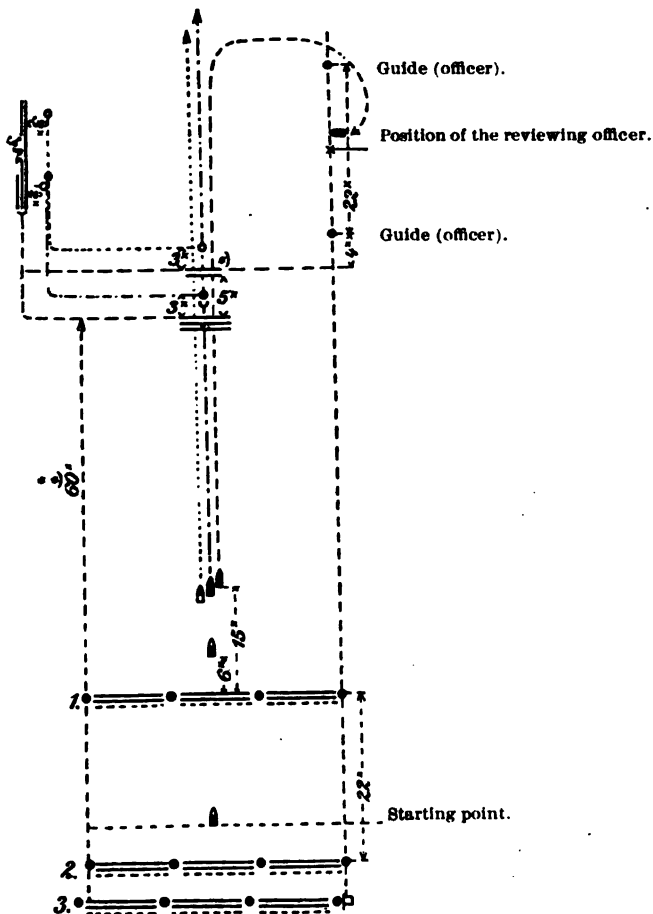
PLATE IX.—*Formation for march past in company front.*



mand for marching past (when but one company is present, the company commander), and the regimental commander for the march past in regimental column.

498. At **March past** in platoons (company front, platoon columns, regimental column), the places indicated in plates 9, 11, and 12 are taken. For march past in platoons, the company commanders go 6 paces in front of the center of the leading

PLATE X. — *March past in company front.*



* At reviews in regiments the musicians of each battalion form one rank.

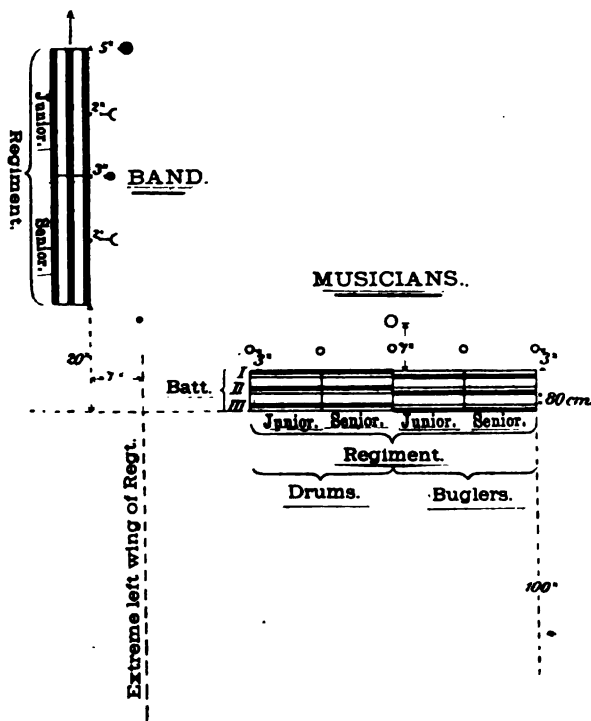
** With a larger number of files the distance may be greater than 60 #.

platoon of their company, the platoon commanders 2 paces in front of the center of their platoons, the left guide (officer) 1 pace in rear of the center of the file closers of the rear platoon.

500. An independent battalion marches in the same formation and with the same distances as a regiment.

501. On marching past the troops look directly at the reviewing officer, except the officer, guides, the color bearers, and the noncommissioned officers who look straight ahead.

PLATE XII.—Position of the musicians and band for march past in regimental column.



INSTRUCTIONS FOR PARADES IN THE PRESENCE OF HIS MAJESTY.

502. The bayonet is fixed. Only such officers are permitted to stand in front of the troops as belong to the infantry or are ordered by the Emperor for service with these troops. Only noncommissioned officers and reenlisted soldiers are in the line of file closers, who are to be distributed equally. Honors are executed first by all the troops and then by brigades. At the first salute three cheers are given. If the

review takes place on the occasion of an imperial maneuver, each band passes from the "present march" to the national hymn as soon as His Majesty has reached the band of a command.

While riding along the front, only officers of the grade of brigade commander and upward, and foreign officers among the spectators, may follow the suite.

The regimental commanders (commanders of independent units), after marching out of column, place themselves on the left side of His Majesty and give, without being asked for them, the names of all the officers, down to and including the company commanders.

If the honorary commander of a regiment, etc., or a supernumerary officer attached to a command by way of compliment, takes part in the review, he stands—without adjutants—with sword drawn, to the right (left) of and alongside the commander.

At review the honorary commander is in front of the supernumerary officer and the latter in front of the commander. They leave the column in the same order.

If the supernumerary officer is junior to the commander in length of service, he stands to the left and rear of him at parade formation, and at review rides one-half the length of a horse in rear and to the left of the commander.

In doubtful cases the commanding general obtains the decision of the Emperor.

If a change in the intended direction of the march past becomes necessary, on account of the direction of the wind, consent must be requested from His Majesty.

2. ESCORT OF THE COLOR.

503. The colors are received by a company, with the musicians of the battalion and the regimental band, when this is present. The junior officer of the company, the color bearers, and a noncommissioned officer for each color enter the building in which the colors are kept and await the company.

The company marches up to in front of the building, the right squad opposite the entrance, if room permits. The march may be executed thus: **Squads right.** The musicians and

the band execute squads right. **On right into line March, Halt.** The first squad wheels, then marches straight ahead, and at **Halt**, comes to the halt. The rest of the squads march about the width of a squad beyond the turning point of the preceding squad, wheel of their own accord, and then march straight ahead until on a line with the preceding squads. The men take up alignment and dress, and then look straight to the front.

As soon as the company is halted, the colors are brought out, the officer being in front of and the noncommissioned officers in rear of them. The company commander presents arms. The colors are brought in front of the right wing, the officer stepping to the left, and a second officer, the next junior, to the right of them. The accompanying noncommissioned officers take their places in the company, going around the right flank. The company now marches off. For this purpose the command, **Break from the right, right squad, squads left**, may be given. Musicians and band, without playing, march by breaking from the right in front of the company and halt in such a manner that they are past the right squad of the company. At **Company March**, the musicians step off while beginning to play, the band, colors, and squads joining from the right flank. The colors, four to a rank, with both the accompanying officers, remain in front of the right squad and in rear of the band while marching. The company follows. The company commander alone rides in front of the colors.^a

The color company renders honors only in presence of His Majesty. The colors are drooped for the purpose.

504. When the company approaches the building when returning the colors, the drums beat to the color.

As soon as the company halts, the colors move in front of the right flank. The company presents arms. At **Attention**, the accompanying noncommissioned officers step behind, and the junior officer in front, of the colors. The officer next to the junior takes his place in the company. Immediately after the present, the junior officer, who, as well as the color bearers and the color guard, does not execute the present,

^a These instructions also apply in marching past with escorts of honor.

commands **Colors**.....**March**, and brings the colors into the building. Then the signal is given to cease playing. The company marches off without waiting for the officer, color bearers, and the accompanying noncommissioned officers.

505. If there are several commands assembled on parade their colors are received and returned by one company. When the color company has arrived at the parade ground the company commander causes it to halt and commands **Colors, Posta**. The colors march to the battalions, accompanied by an officer and noncommissioned officers. The present is not given by the troops when the colors arrive.

If the troops are formed directly in front of the building in which the colors are, the detailing of a particular color company is omitted. The officers and the colors with the noncommissioned officers come out of the house at the designated time and take their places by the shortest way. The troops present arms.

506. For receiving and returning the colors one officer with a squad, exclusive of the color bearers and color guards, suffices if (a) a long march is imminent or has taken place; (b), the color company would have to take a long circuitous route; (c), the colors are to be taken from the residence of one superior to that of another. The escort of the colors to and from the residence of His Majesty or of foreign rulers is always performed, even in these cases, by a company.

3. SALUTES.^a

507. Salutes paid by individuals without arms, consist in facing to the front, touching the head dress with the right hand, assuming an erect position, and standing facing the superior.

Noncommissioned officers with officers' side arms unhook the sword and carry it vertically in the left hand. The superior must be looked at when saluted. If necessary, room must be made for him.

Salutes are executed smartly. They begin 6 paces in front of and terminate 3 paces in rear of the superior.

^a Garrison regulations.

Facing to the front. If the man meets a superior, he executes a half turn toward him during the last step before the halt, placing the heels together, and assumes the position of the soldier. He keeps his head turned toward the superior, and follows him with his eyes while turning his head. If the man crosses a superior's path, he remains standing at a suitable distance, facing toward him. If the superior waives the facing to the front by beckoning, or desires a premature ending of the salute, the man goes on and salutes by touching his cap with the right hand.

When touching the headdress with the right hand, the man walks with an easy step, and 6 paces in front of the superior raises the right hand smartly, fingers joined; index and middle fingers touching the lower edge of the headdress so that they are at about the outer angle of the right eye and so that he can see past the hand. The right elbow is raised to about the height of the shoulder. The left arm is kept still. When ending the salute, the man directs his head straight to the front, at the same time dropping the right hand smartly. When passing by at attention, the arms are not moved. When at a halt, the individual faces toward the superior to be saluted.

508. The salute by the individual armed with the piece, and at a halt, consists in assuming the "order arms" or, if the piece is slung, retaining it in that position. If in march the salute is rendered by assuming the "shoulder arms" or, if the piece is slung, by retaining it in that position. When at a halt, the individual faces toward the superior. When passing by at "shoulder arms" the right arm is moved. When passing by with the piece slung, both arms are kept still.

509. Salutes by units in close order are executed at the command of their leaders. When at a halt: **Attention** is given. The men look at the superior. If necessary, the command **Eyes.....Right (Eyes.....Left)** must be given. If the superior walks or rides along the front of the command, the men follow him with their heads until he is opposite the third man, and then of their own accord, direct their heads straight

to the front. When marching: **Attention, Eyes.....Right** (**Eyes.....Left**), **At ease** is given. At **Attention**, the drill march is taken up. When marching without arms or with pieces slung, the arms are not moved. At **At ease**, the men direct their heads straight to the front and continue the march at attention (see paragraphs 18 and 21). The leaders of detachments below the strength of a platoon, march alongside the man on the flank while saluting, and the commanders of platoons and upward, in front of their units.

APPENDIX.

MUSICIANS AND BAND.

MANNER IN WHICH INSTRUMENTS ARE CARRIED BY THE MUSICIANS.

510. The bugle is carried in a horizontal position by its cord over the right shoulder beneath the shoulder strap, the mouthpiece 2 cm. below the waist belt, pointing toward the front. It is supported by a device fastened to the waist belt by means of loops.

If the bugler is carrying a pack, the bugle is slung over the right shoulder after the knapsack has been fastened. In battle the bugle is carried in the hand or hanging in front of the breast.

511. The fife is carried in the right hand, mouthpiece down, and, if not used, it is in the case. This hangs at the left side of the waist belt, 5 cm. behind the side arms, the spring pointing toward the front. To use the fife, it is brought to the mouth with the right hand at the signal of the battalion drum major and at the same time grasped with the left hand. The second, third, and fourth fingers of the left hand must immediately cover the three upper keyholes, the right hand quickly following, the fingers taking the correct position.

After the fife is ended both arms are brought down smartly at the same time at the step following the last note.

512. At the "order arms" the drum is so secured that the catch engages in the holes of the hoop. The drum rests over the left leg, the snare head pointing outward and the left hand resting on the support. The lower edge of the batter head rests firmly against the left leg. When marching in step, the drum is so tilted with the left hand that it does not impede the left leg in marching.

The drumsticks are carried in the right hand, which hangs naturally, and are so held that the stick for the right hand points head down, while that for the left points handle down.

The shoulder arms. At **Shoulder**, the left hand takes hold to the right and alongside of the support. At **Arms**, the drum is turned with a short movement, batter head pointing up. The knee guard rests on the left thigh; both hands are immediately placed over the drum, the left hand grasping the stick at the handle. Both sticks are crossed on the center of the batter head, so that the head of the right stick lies immediately over that of the left. The left hand rests on the hoop.

Order arms. At **Order**, the sticks are placed together in the right hand so that the left stick is held close to the batter head. The right arm returns to the extended position at the side; at the same time the left hand grasps the hoop of the snare head to the left of the knee guard. At **Arms**, the drum is raised from the thigh with the left hand and turned so that the hoop of the batter head rests against the leg, snare head pointing outward. The left hand returns to the support. When marching in step, the drum is carried as at "order arms." Only when it is to be beaten is it carried as at "shoulder arms." For short marches it is carried in either hand without unfastening the sling at the support. On longer marches the sling is unhooked, hooked into one of the screws, and laid over the shoulder.

MANIPULATION OF THE BATON.

513. At "order arms" the right hand grasps the stock beneath the ball with the entire hand, little finger on top. The right elbow is somewhat raised.

The staff rests with the point directly against the right of the left toe and is somewhat inclined to the right and front, left arm by the side.

At "shoulder arms" the right hand is about 10 cm. in front of the buckle of the waist belt, the right elbow somewhat raised. The staff is inclined a little to the right, point upward. At present arms and at reviews the left hand rests upon the hip, the first joint of the thumb being fixed in the waist belt.

At **Attention**, the baton is quickly raised laterally to the

right, and at **Shoulder**, while giving the signal, brought down smartly until in front of the belt buckle.

If His Majesty rides past, no movements are made with the baton.

In the march past the right arm is kept still, moved freely.

To signify that the march is to be begun, the right arm is raised high laterally, the baton in prolongation of the arm, at **Company**, etc. At **March**, the signal is given by lowering the baton.

For giving the signal to begin or cease playing, the baton is raised high, the left foot is planted, and lowered at the fifth step following.

If in the march past the musicians are to execute left turn after the "prelude"^a has ended, the baton is extended horizontally to the left. The baton is brought back in front of the belt buckle, point upward, at the fifth step following the completion of the turn.

The battalion drum major gives the signal for change of direction by turning the baton in a circle with the arm pressed toward the body and wrist loose.

For halting and turning, the baton is raised as for the "prelude," and lowered at the fifth step following. At the seventh step the battalion drum major again raises it and gives the signal for "right turn" at the eleventh step. He beats time for the music, while raising and lowering the baton smartly about a handbreadth. In no other case must the time be given.

For the musicians (and the band) to step off, the battalion drum major, after the march past, raises the baton as for the "prelude" as soon as the rear detachment has passed him (the bandmaster raises his baton as for starting in the march past). Both give the signal at the same time for stepping off at the fifth step. The same signals are given for turning, marching straight ahead, and for cessation of playing.

FORMATION AND DUTIES OF MUSICIANS AND BAND.

514. Formation and duties, paragraphs 141, 221. (Plates I and XII.)

^a Locken—"prelude," played by the drums and fifes immediately before the band begins.—Tr.

The buglers take up the signals only at the order of an officer. See Field Service Regulations. When charging, the drums beat the charge without orders when the piece is brought to the charge, but the double time as soon as the command **March, march**, is given.

515. At Attention; Present.....arms the musicians proceed as in Supplement II.

The battalion drum major gives the signal for beginning and ending the marches.

The band plays a march from Collection I of the military marches (slow marches for the infantry), unless a special ceremonial march has been conferred on the command.

The playing of the marches is continued, even when cheers are given at parades in presence of His Majesty.

516. At the march past (par. 498) the drums begin to beat the military march (Supplement II, 5) at **March**, and when 20 paces before reaching the first guide pass over to the "prelude" (Supplement II, 9). After the "prelude" the band begins a march from Collection II of the military marches (quick marches for the infantry) unless special ceremonial marches have been conferred on the command.

Specially conferred marches may not be played by any other commands who may be present at the parade with those having this privilege.

At the signal from the battalion drum major and the bandmaster, given simultaneously with the ending of the "prelude," the musicians and band execute left turn and march 7 paces past the left flank of the troops. The musicians here turn to the right, the band following them.

Directly after turning on the moveable pivot the musicians at the planting of the left foot direct their heads to the right by files; up to that time they have directed their eyes upon their leaders.

The battalion drum major and the bandmaster, during the turning, mark time for a few steps, turn in a small circle to the right, and place themselves 3 paces to the side and in front of the left flank.

Musicians and band halt at the signal from their leaders, execute right face, and direct their heads straight to the front. At the same time the battalion drum major and the bandmaster

execute about face, march until in front of the center of the musicians and band, and face toward the reviewing officer. There is an interval of 3 paces between the musicians and band opposite the reviewing officer. After halting, the drums fill this interval. They march, at the signal for turning, 3 paces farther ahead, execute by the right flank at the third step, mark time 1 step, and with 3 steps move up into the first rank.

During this movement and the march past of the battalion, the drummers accompany the band with the march No. 6 in Supplement II. This march begins after the "prelude" has ended and left face has been executed. After the last detachment has marched past, the musicians and band step off at the signal from the battalion drum major and the bandmaster, turn to the left, and follow the battalion. At the second guide the music ceases.

If there is no band with the battalion, the musicians, after the "prelude" is ended, again play the military march during the march past.

The musicians of the regiment (brigade) are consolidated only at reviews. The regimental drum major leads them and places himself 5 paces in front of the right flank of the drummers. (Plate XII.) Bandsmen do not move their arms when approaching and leaving the reviewing point.

517. At the march past in larger commands the musicians at the head of the column mark time until the higher commanders are on the march. The musicians and band of the leading regiment march out toward the left. The musicians remain standing during the march past of the dismounted troops of their division and play through the "prelude" at the arrival of each new regiment or independent battalion. The drummers of the regiment coming up join at the fifth step and play the rest of the "prelude." Then, with the exception of the right guide, they turn their heads to the right and march past. The buglers do not move their arms before and after the "prelude."

The "prelude" must begin at 13 paces before reaching the first guide officer. As soon as its unit has passed, the band, at the signal from the bandmaster, marches straight to the front, still playing, until behind the center of the troops. Here it

turns to the left and follows the troops. At the same time that the regimental drum major gives the signal for the "finale" the bandmaster gives the signal for the band to cease playing.

The band of the command following takes the place just vacated.

If the newly arriving command has no band, the one belonging to the troops just passed remains and plays for the march past of the newly arriving troops and then turns and follows. After the last dismounted troops of the division have marched by, the musicians follow the band.

518. For the march past in regimental column the bands of the brigades, marching by the left flank, arrive at their places under the guidance of the senior bandmaster. Even at the march past the bandmaster leading the bands retains his place 5 paces in front of the left flank of the bands. (Plates XI and XII.) The drummers assemble at the left wing and are arranged as follows from right to left, viz, snare drums, cymbals, and base drums. The drummers of the first brigade beat march No. 7, Supplement II, and conclude it at the signal from the senior drum major, which begins as he plants the right foot 8 paces before the reviewing officer. Immediately on planting the left foot the bands begin to play a military march at the signal from the senior bandmaster.

The other bandmasters also beat time.

The musicians march straight to the front, their eyes directed on the regimental drum major. He raises the baton after he has passed 7 paces beyond the player of the bass drum, and at the fourth step thereafter gives the signal to turn to the left. The drummers place themselves, while turning to the right at the beginning, at a distance of 5 paces to the left and alongside of the band and accompany it with No. 8 march, Supplement II. The buglers follow the drummers, march along behind them, and also station themselves on the left flank. The battalion drum major, who marches on the left flank of the buglers, gives the signal for turning and halting.

At the approach of the second brigade, the drummers of the first are signaled to cease playing and pass to the "prelude," while the drummers of the second brigade begin playing at the fifth step. (Supplement II, 9.)

The bands of the first brigade, as soon as those of the second have arrived at 10 paces from their right flank, move back 9 steps in time while playing, at the signal of the leading bandmaster.

The bands of the second brigade march into the position of the first, come to a halt at the signal from the leading bandmaster, execute a right face at the fifth pace, and at the same time prepare their instruments for playing.

While the leading regimental drum major gives the signal for the "prelude," the leading bandmaster of the first brigade gives the signal for the band to cease playing.

The band immediately executes left face and marches at the fifth step thereafter, heads directed to the right.

After the "prelude" the bands of the second brigade begin playing and are accompanied by the drummers of the first brigade, who remain during the march past of the dismounted troops of the division.

After the march past of the last dismounted troops of the division, the musicians and the band execute left face at the signal from the leading regimental drum major and the bandmaster, and march at the fifth step, heads directed to the right.

519. If on the march in column of squads the musicians are at the head of the column, they form ranks of four men.

The buglers are on the right, and the battalion drum major 3 paces in front of the center.

The band follows the musicians, also in ranks of four men, the bandmaster in front.

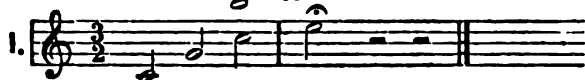
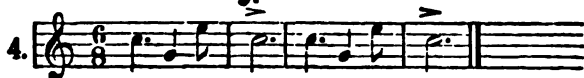
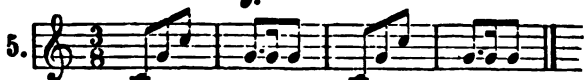
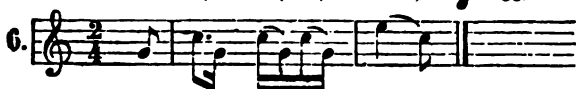
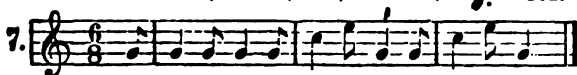
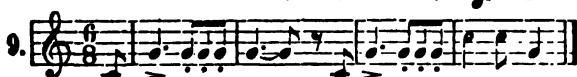
At **Marching order**, the musicians resume the places in their companies which are indicated in Plate IV.

Supplement I.—CALLS.

Calls are principally used in garrisons, and for the routine duties of troops (barracks, billeting and bivouac). At maneuvers the commander makes use of calls terminating the fight, for carrying it on, or for assembling the commanders or adjutants, as well as for assembling and recalling troops. In battle, calls are prohibited, except: **Fix bayonet, Quick forward, and Attention.**

LIST OF CALLS.

1. The entire unit.
2. I. Battalion.
3. II. Battalion.
4. III. Battalion.
5. IV. Battalion.
6. 1st Company (also fifth, ninth, and thirteenth).
7. 2d Company (also sixth, tenth, and fourteenth).
8. 3d Company (also seventh, eleventh, and fifteenth).
9. 4th Company (also eighth, twelfth, and sixteenth).
10. March. Played in the usual cadence, used in advancing; in rail journeys, the men disembark; when played rapidly, quick forward.
11. Halt.
12. Assembly. Formation in close order. When traveling by rail, the men embark.
13. Clear the road. See Field Service Regulations.
14. Attention. To signal the approach of cavalry; played slowly, prelude to tattoo.
15. For firing. (This call may only be used at target practice and notifies those in the pit that firing is to begin.)
16. Fix bayonet.
17. Commanders' call.
18. Adjutants' call.
19. Recall. The troops march off at the conclusion of the exercise.
20. The alarm. The quickest formation, fully equipped, at the places for alarm or for occupying designated points.
21. Fire call.
22. Retreat.
23. Reveille.

THE ENTIRE UNIT. $\text{♩} = 60$ I. BATTALION. $\text{♩} = 72$.II. BATTALION. $\text{♩} = 104$.III. BATTALION. $\text{♩} = 112$.IV. BATTALION. $\text{♩} = 92$.1. COMPANY (also 5'', 9'', and 13''). $\text{♩} = 88$.2. COMPANY (also 6'', 10'', and 14''). $\text{♩} = 112$.3. COMPANY (also 7'', 11'', and 15''). $\text{♩} = 112$.4. COMPANY (also 8'', 12'', and 16''). $\text{♩} = 112$.

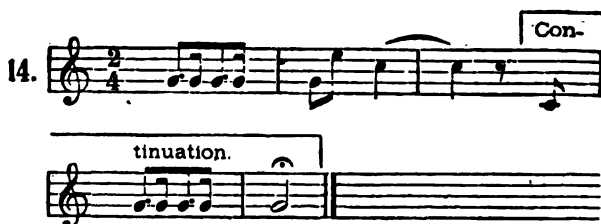
MARCH. Played in the usual time $J = 114$, used in advancing; traveling by rail, the men get off; played very rapidly $J = 120$, "quick forward."



ASSEMBLY. Formation in closed order. When traveling by rail the men get aboard.



ATTENTION. On the approach of the enemy's cavalry $J = 132$. Played slowly $J = 72$ and with the continuation, prelude to tattoo.



FOR FIRING. This call can be used only at target practice, and notifies those in the pit that firing is to begin.

$\text{♩} = 112.$



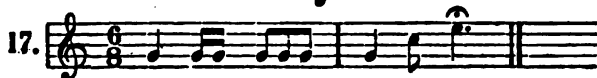
FIX BAYONETS.

$\text{♩} = 160.$



COMMANDER'S CALL.

$\text{♩} = 84.$



ADJUTANT'S CALL. (Also for delivering orders.)

$\text{♩} = 104.$



RECALL. The troops march off at the conclusion of the exercise.

$\text{♩} = 84.$



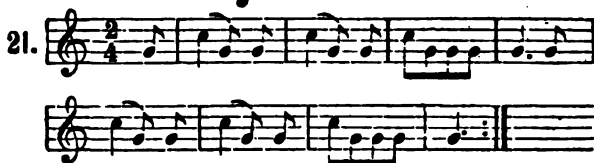
ALARM. The quickest formation, fully equipped, at the places for alarm or for occupying designated points.

$\text{♩} = 124.$



FIRE CALL.

$\text{♩} = 184.$



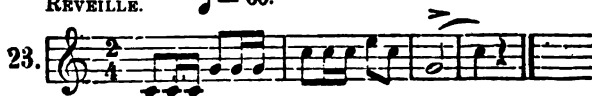
TATTOO.

$\text{♩} = 72.$



REVEILLE.

$\text{♩} = 60.$



Supplement II.—MARCHES FOR FIFE AND DRUM.

All infantry regiments play, while presenting arms, first No. 1 march and then No. 1 and No. 3, alternately, "present" marches as written in this supplement, unless particular marches have been conferred upon them or orders exist to the contrary.

As soon as one of the marches has been played through there is a pause of two steps before playing is resumed.

The marches are at the rate of 80 steps per minute.

- | | |
|--------|----------------------|
| No. 1. | } "Present" marches. |
| No. 2. | |
| No. 3. | |
| No. 4. | |

No. 5. March past in platoons, company front, and platoon columns (army march).

No. 6. For accompanying the band at march past in platoons, company front, and platoon columns (without fifes).

No. 7. March past in regimental column.

No. 8. For accompanying the band at march past in regimental column (without fifes).

No. 9. Prelude with fifes and drums joining in at march past.

No. 10. March while advancing.

No. 11. Salute to the color.

No. 12. Dead march.

No. 1. Old Prussian Grenadier March.

(♩ = 80.)

Fife.

Drum.

The musical score is arranged in three systems, each with a Fife part (treble clef) and a Drum part (bass clef). The key signature is one sharp (F#) and the time signature is common time (C). The tempo is marked as (♩ = 80.). The Fife part consists of a single melodic line with various rhythmic patterns, including eighth and sixteenth notes, and rests. The Drum part consists of a single line with rhythmic patterns represented by vertical strokes and beams, indicating the drum's accompaniment. The score ends with a double bar line.

No. 2. ($\text{♩} = 80.$)

Fife. $\underline{2}$

Drum.

No. 3. ($\text{♩} = 80.$)



No. 4. (♩ = 80.)





NO. 5. MARCH PAST IN PLATOONS, COMPANY FRONT
AND PLATOON COLUMNS. (Army march.)

(♩ = 114.)



Fine.

Fine. *fz* *fz*

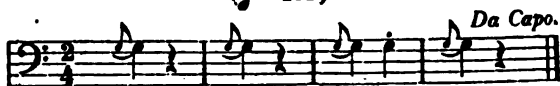
fz

1 2

Da Capo.

No. 6. FOR ACCOMPANYING THE BAND at march past in platoons, company front, and platoon columns. (Without fifes.)

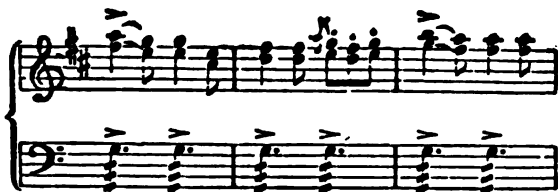
(♩ = 114.)



No. 7. MARCH PAST IN REGIMENTAL COLUMN.

(♩ = 114.)





No. 8. FOR ACCOMPANYING THE BAND at march past
in regimental column. (Without fifes.)

(♩ = 114.)



No. 9. PRELUDE, with fifes and drums joining in at march past. (♩. = 114.)



No. 10. MARCH WHILE ADVANCING. (♩ = 114 and 120.)



No. 11. SALUTE TO THE COLOR. (♩ = 114.)



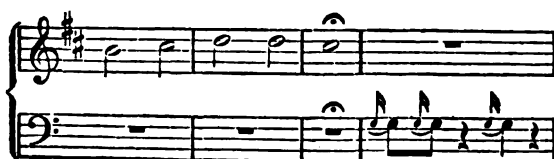


No. 12. DEAD MARCH.

As soon as the coffin is carried from the house arms are presented. The drummers beat the usual march with muffled drums, the fifers do not play, the band plays a dirge without muffling its instruments. As the procession moves off and during the march, the drummers beat the dead march, the bandsmen playing only dirges.



Roll of about } Prelude.
20 steps.



Prelude.



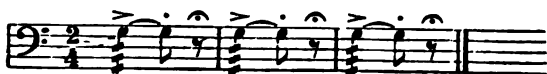
The drum-major gives the signal for the prelude after the roll of the drums as well as between the strophes of the dirge.

If there is no band present at the funeral procession, the fifers play the dirge.

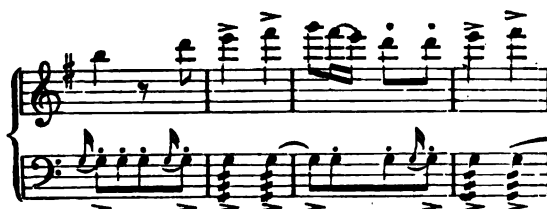
Supplement III.—OTHER PIECES FOR FIFE AND DRUM

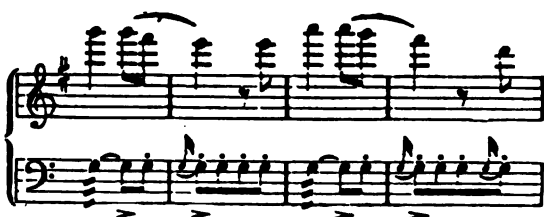
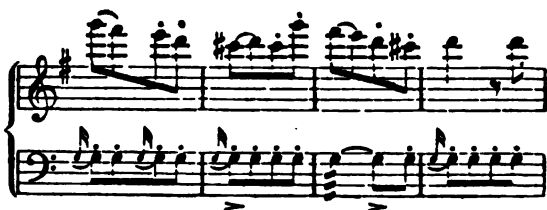
- No. 1. Prelude to tattoo.
- No. 2. Old Prussian tattoo.
- No. 2a. Tattoo.
- No. 3. Prelude to special tattoo.
- No. 4. Special tattoo.
- No. 5. Church call.
- No. 6. Recall from church.
- No. 7. Reveille.
- No. 8. Assembly of guard details.
- No. 9. Signal to leave the marching column (Field Service Regulations), or dismissal; e. g., a guard on being relieved.
- No. 10. Relieving the guard.
- No. 11. General, for the drums.
- No. 12. Fire call, for the drums.

No. 1. PRELUDE TO TATTOO.

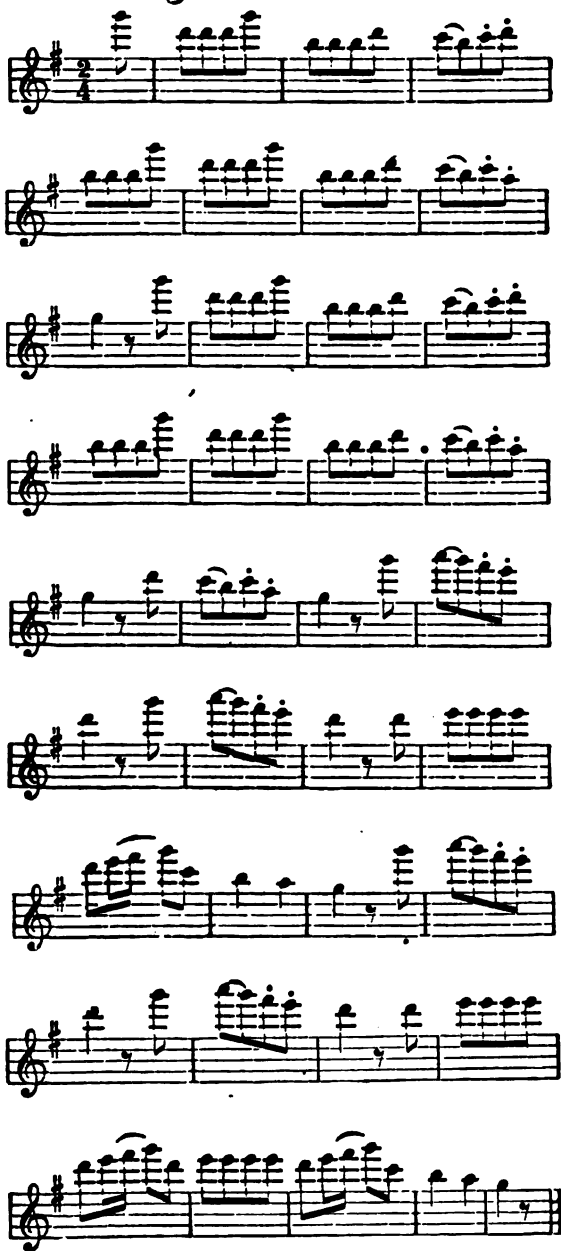
No. 2. OLD PRUSSIAN TATTOO. ($\text{♩} = 80$.)

The fifer can also play No. 2a alternately.





No. 2a. (♩ = 80.)



No. 3. PRELUDE TO SPECIAL TATTOO.

All fifers and drummers. } One fifer Solo,
One drummer with the right stick.

Presto.
ff rulant.

All fifers and drummers. } One fifer.
One drummer. } Twice from mark.

The regimental or battalion drum major gives the signal for beginning the roll as well as ending the same; the solo drummer and fifer continue the roll about one-half longer and play the last part alone, as is indicated.

No. 4. SPECIAL TATTOO.

(♩ = 114.)

(If the band plays, the fifers do not).

MARCH.

The measures until *Tutti* are beaten at a halt.
One drummer *Solo.*



All the drummers.





No. 5. CHURCH CALL.



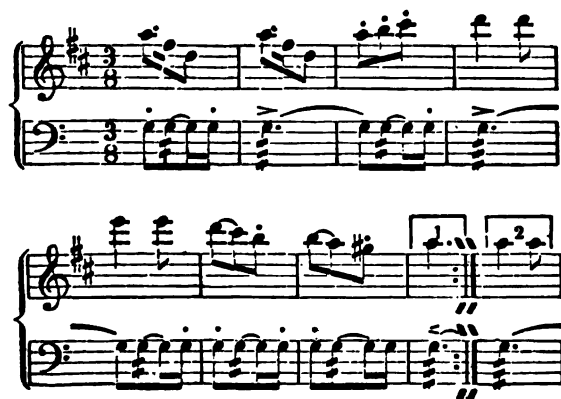


The last roll begins very marked and concludes *decrecendo* to *pianissimo*.

No. 6. RECALL FROM CHURCH.



No. 7. REVEILLE.





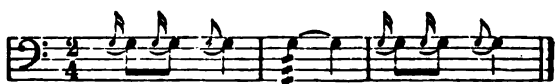
No. 8. ASSEMBLY OF GUARD DETAILS.

(J = 114.)

To save time the second part is not repeated. The prelude, No. 1, is played in this case.



No. 9. DISMISSAL.



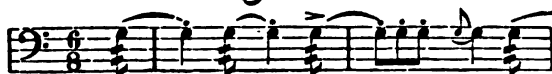
No. 10. RELIEVING THE GUARD.

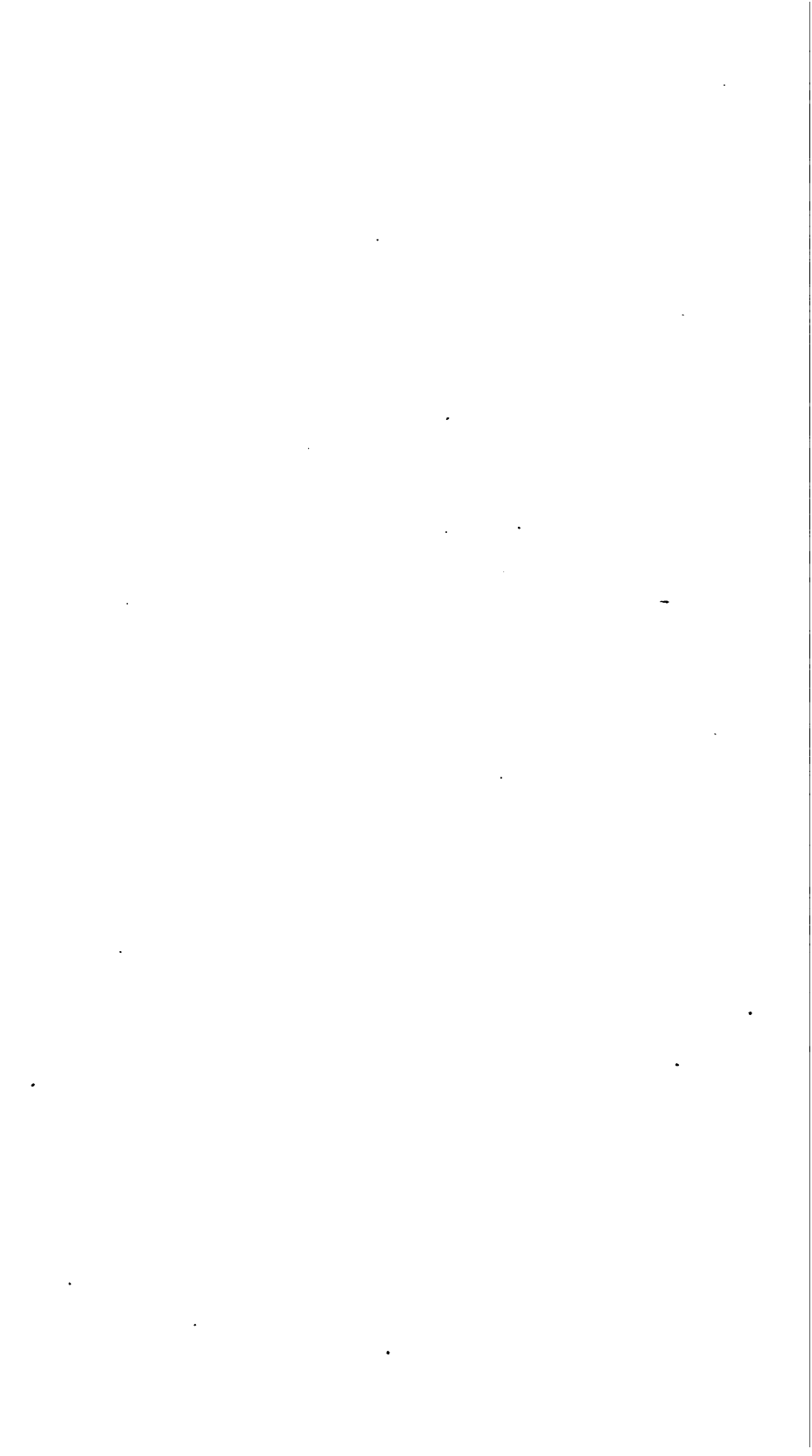
(♩ = 114.)



No. 11. GENERAL, FOR THE DRUMS.

(♩ = 80.)





WAR DEPARTMENT . . OFFICE OF THE CHIEF OF STAFF

SECOND (MILITARY INFORMATION) DIVISION

GENERAL STAFF

No. 11

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JULY 1, 1907.



WASHINGTON

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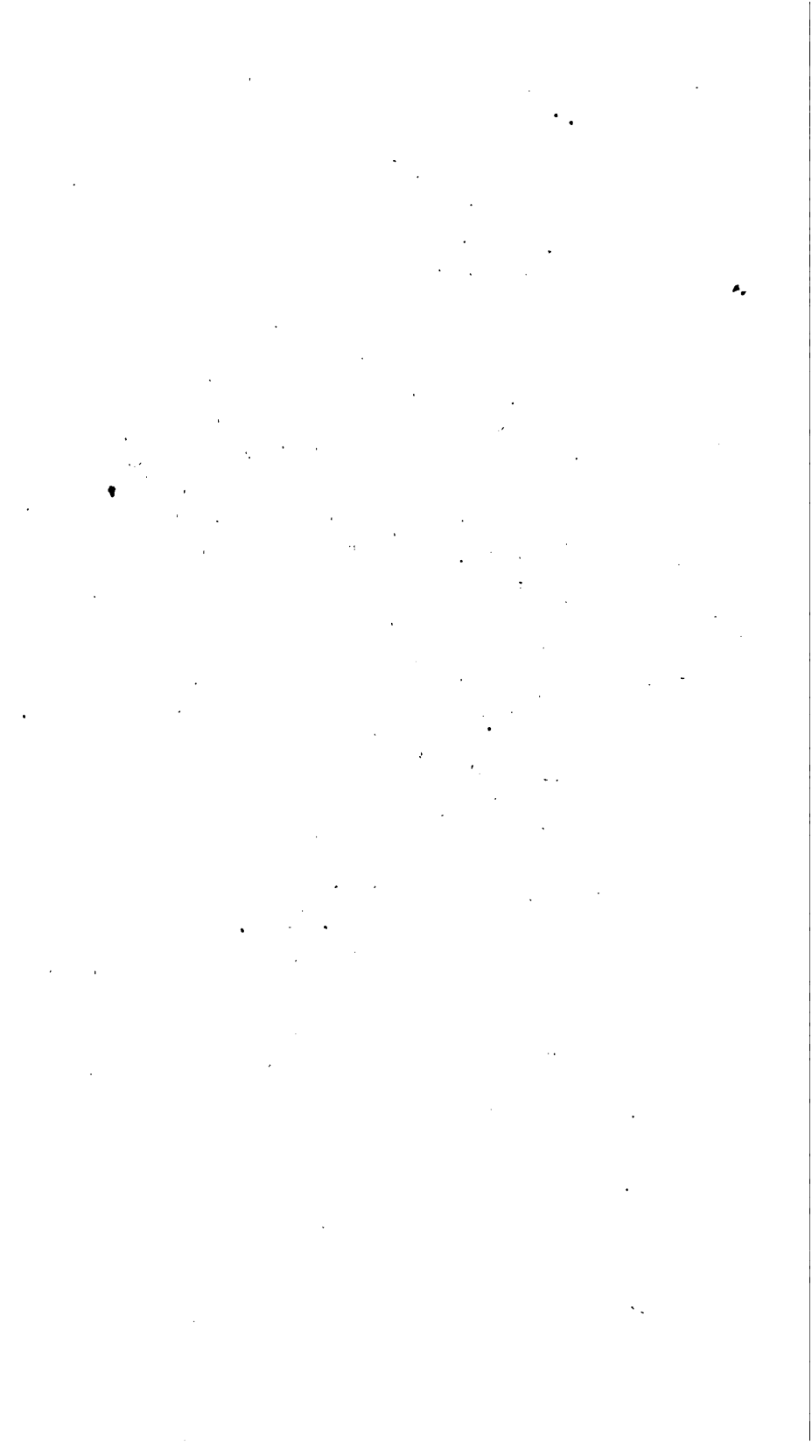
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JULY 1, 1907



WASHINGTON
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WAR DEPARTMENT

Document No. 300

Office of the Chief of Staff

EPITOME OF THE RUSSO-JAPANESE WAR.

LANDING OF THE FIRST JAPANESE ARMY.

The rupture of diplomatic relations by Japan on February 6, 1904, was coincident with the dispatch of the first expedition to the theater of operations. On this date Vice-Admiral Togo left Sasebo with a fleet of 7 battle ships, 18 cruisers, a flotilla of destroyers and one of torpedo boats, conveying the transports *Tairen*, *Otaru*, and *Heijo*, carrying troops belonging to the Twelfth Division.

The squadron rendezvoused off Mokpo (southern Korea) on the next day, and from that point Togo sent Rear-Admiral Uryu, with 4 cruisers and a torpedo-boat flotilla, to convoy the transports to Chemulpo, the port of Seoul, and sailed for Port Arthur with the remainder of the fleet.

Admiral Uryu arrived at Chemulpo on February 8, and all the troops were safely landed. On the next day Uryu engaged the Russian cruiser *Varyag* and gunboat *Koriets* which had been lying in Chemulpo Harbor, and which, after an engagement of about one hour, returned to the harbor, where they were destroyed by their commanders the same evening. On the night of February 8 Togo sent a torpedo-boat flotilla against the Russian fleet at Port Arthur and succeeded in inflicting such damage that the Japanese evidently concluded they could continue the transportation of troops to the theater of war.

By February 15, 12 transports, carrying about 3,000 horses and 14,000 troops, were loaded at Nagasaki and sailed to reinforce the troops landed at Chemulpo.

The First Japanese Army, of which the force landed at Chemulpo on February 8 was the advance guard, was commanded by General Kuroki, with General Fujii as chief of staff. It consisted of the Second, Twelfth, and Imperial

Guards Divisions,^a commanded, respectively, by Lieutenant-Generals Nishi, Inouye, and Hasegawa. The two brigades of the Second Division were commanded by Major-Generals Matsunaga and Okasaki; of the Twelfth, by Kigoshi and Sasaki; of the Guards, by Asada and Watanabe. At the crossing of the Yalu the artillery included also twenty 12 cm. howitzers.

Primarily the Japanese intended to land the First Army at Sun Chong on the bay of the same name, in the extreme southeast of Korea, about halfway between Masampo and Mokpo, and march thence to Seoul, and preparations were in progress with that end in view. Their success at Port Arthur and Chemulpo, however, allowed the use of Chemulpo and practically advanced their campaign one month.

The main portion of the command landed at Chemulpo on February 8, proceeded to Seoul, the capital of Korea, moving principally by rail, and reinforced the Japanese garrison of 250 men stationed there. This not only gave the Japanese a great political advantage in Korea, but was the beginning of General Kuroki's advance by the main highway leading to the Yalu.

The landing of troops and supplies was pushed at Chemulpo, but the harbor is not favorable for rapid work. For example, the Fourteenth Regiment arrived on February 18 and its landing was not completed until the 21st.

On February 14 two companies were sent, one to Fusan and one to Gensan, the latter by marching from Seoul. One company of the Fourteenth Regiment was sent by steamer to Waichu, whence it marched to Phyangyang, arriving February 20. The northern advance of General Kuroki may be said to begin with the movement of the latter company. The advance by land began with the divisional cavalry and Fourteenth Regiment under Major-General Sasaki on February 22.

^a Each Japanese division contained normally four regiments of infantry, one of cavalry, one of artillery, and the various detachments of technical troops, making a total of about 14,000 effectives and 6,000 noneffectives. The regiment of cavalry, that of artillery, and the battalion of engineer troops have the same numerical designation as the division of which they form a part.

On March 5 Major-General Yamani, of the Japanese engineers, arrived with several officers and 300 engineer troops, for the purpose of constructing the Seoul-Wiju Railway.

A Japanese detachment of 6 squadrons and 1 battalion landed at Chinampo on March 13 and marched to Anju.

The Twelfth Division started north from Phyongyang on March 21, the head of the Guards Division, two battalions, with General Kuroki, arriving from Chinampo, where it had landed, about noon of that day. They were followed by the remainder of the division under Lieutenant-General Hasegawa.

On March 29 the entire Second Division had completed its landing at Chinampo, thus raising the force moving northward to about 45,000 men. The Guards and Second Division had begun embarking at Ujina, the port of Hiroshima, on March 8.

The occupation of Phyongyang allowed troops and supplies to be landed at Chinampo, about 40 miles distant by a road free from difficult grades. This was a saving of 120 miles over the route previously used via Seoul. Profiting by high tides, supplies were towed up the river in sampans and landed at Mankundai, only 7 miles from Phyongyang. Chinampo had the further advantage of a direct road to Anju, saving from 10 to 15 per cent of the distance via Phyongyang.

Speaking of the manner of advance an eyewitness says:

The advance movement of the Japanese troops resembles the coaling of a ship by small baskets at Nagasaki; rarely does a larger unit than a battalion move at one time.

Moving north from Phyongyang to Anju the Twelfth Division moved on the Syunchyen road; the Guards, on the Syunan road; the Second Division, along the seashore.

A company of Japanese infantry, from the Guards Division, with some cavalry, came into conflict with a body of about 600 Russian cavalry south of Chengju, March 28. Four Japanese, including an officer, were killed and 12 wounded. The detachment occupied Chengju the same day.

The skirmish began at 11.50 a. m., near the south gate of the town where the Japanese cavalry was fired upon. They then rode around to the north gate while the infantry attacked the south gate.

The Russians, from the First Chita Regiment, commanded by Colonel Pavlov, withdrew toward Wiju. This regiment and the First Verkhne-Udinsk formed the Cossack brigade, commanded by Major-General Mishchenko, which reconnoitered the Japanese approach.

On April 4 the Japanese advance guard reached and occupied Wiju, the opposing cavalry having crossed to the right bank of the Yalu on the preceding day.

On April 10 and 12 small detachments of Russians attempted to cross the Yalu below Wiju, but failed in both cases after sharp skirmishes.

In the meantime Kuroki concentrated his army at and near Anju and, on April 7, moved on Wiju, leaving small infantry garrisons at Chinampo and Phyangyang. Supplies were landed from the sea at the mouth of the Chyongchyen River, Usiho, and on the Chiulsan Peninsula, thus materially relieving the demands upon the single road over which the army was moving.

Major-General Sasaki, with a covering detachment of 3 battalions, 1 squadron, 2 mountain batteries, and accompanying service troops, was held at Phyangyang until the rear of the army left Anju. The detachment then marched on Chongsung, where it arrived about the same date as the main body arrived at Wiju, April 20.

The twenty 12 cm. howitzers landed at Ihoaphu about April 10 and reached Wiju on the 26th.

The occupation of Wiju again brought relief to the line of communications back through Anju, Phyangyang to Chinampo. It allowed troops and supplies to be landed in the estuary of the Yalu, as at Yongampo.

This shortening of the line of communications was of incalculable benefit, for, across a large river not fordable below Suikouchen (8 miles above Wiju), a not inconsiderable force faced the First Japanese Army.

This Russian force, called the Eastern Detachment, based on Liaoyang, with secondary base at Fenghuangcheng, consisted at first of 8 battalions, 32 sotnias, and 38 guns. On April 22 Lieutenant-General Zasulich arrived and took command of the reenforced Eastern Detachment, which then contained about 25,000 effectives, and was reorganized as follows: The main body consisted of the Ninth, Tenth, Elev-

enth, Twelfth, and Twenty-fourth East Siberian Rifle Regiments, the First, Second, and Third Batteries of the Third East Siberian Artillery Brigade, the Second and Third Batteries of the Sixth East Siberian Artillery Brigade, and 1 machine gun company (18 battalions, 40 guns, and 8 machine guns), and held the right banks of the Ai and Yalu rivers in the region opposite Wiju.

The left flank detachment consisted of the Argunsk and the Ussuri Cossack regiments and 1 mountain battery (12 sotnias and 8 guns) under command of Colonel Trukhin, and covered the left flank and the road leading to Kuantien and Saimachi.

The right flank detachment consisted of Major-General Mishchenko's Cossack brigade reenforced by the Twenty-first East Siberian Rifle Regiment, the First Battery of the Sixth East Siberian Artillery Brigade, and 1 Transbaikalian horse battery (3 battalions, 12 sotnias, and 14 guns), and was charged with reconnoitering the coast from the mouth of the Yalu to Takushan.

THE BATTLE AT YALU RIVER.

(Plate I.)

On the morning of April 26 one battalion of the Guards, crossing by pontoon ferry, drove the Russian outpost from and occupied the island of Kyurito.

On the same morning work was begun on a bridge across the first branch of the river near Wiju. The work was interrupted by the Russian artillery from Conical Hill and a point farther south. The bridge, 237 meters long, and constructed of piles, junks, and other local material, was finally completed on the 27th. On the 27th a bridge was constructed at "a," opposite the southern wall of Wiju. It also was of improvised material, and about 80 meters long.

On the 26th also a small bridge, 30 meters long, was constructed at "b;" the small bridge just above "b" was constructed on the 28th. On the night of the 27th the two small bridges at "c," 108 and 113 meters long, were constructed.

In the meantime a Japanese river flotilla of 2 torpedo boats, 2 gunboats, and 4 armed launches came up the Yalu on April 25, was fired upon by the Russians, and retired to

Yongampo. On the 26th it returned with a large number of junks loaded with bridge material and made a demonstration against Antung. The Japanese claim this demonstration caused the Russians to send their reserves to Tientzu, thus materially weakening their forces facing the intended crossing.

It is to be noted that the main road from the Yalu to Fenghuangcheng starts from Antung and passes through Tientzu. The roads from Chiuliencheng and from Chingkou join at Hamatan and reach the Antung-Fenghuangcheng road at a point about 2 miles north of Tientzu.

On the night of April 28 the Twelfth Division, except one battalion, 1 squadron, and 1 mountain battery, left at Chongsung, concentrated near Suikouchen, and began building a bridge the next morning. A regiment of infantry began crossing by pontoons about noon of the 29th, but was met by the fire of 2 companies, 3 sotnias, and 2 mountain guns from Colonel Trukhin's force. One battalion, however, succeeded in crossing, and covered the bridge building and the further crossing. The bridge, 265 meters long, was completed at 3 a. m. on the 30th, and the main body of the Twelfth Division crossed and moved to the west against Hushan.

In the meantime the Russian detachment which had resisted the crossing at Suikouchen fell back, the sotnias going to Hsiulun, about 30 miles north of Wiju, where they were joined the same day by the remainder of Colonel Trukhin's command, which had marched there by order of Lieutenant-General Zasulich to cover the road leading to Kuantien.

On April 29, under cover of the fire of the battery near Potiehtun, a Russian detachment crossed the Ai River near that village and drove a battalion, some cavalry, and some mountain guns from the Guards, which had occupied the Litzuyen Valley and Tiger Hill on the preceding day, back to Kyurito Island. The Russian detachment was then checked by the fire of the Guards artillery from near Wiju.

At 9 a. m., on April 30, two battalions of the Guards artillery and the twenty 12 cm. howitzers began firing on the Russian trenches at Conical Hill. The Russian battery there replied until 11 a. m. and then ceased firing. The

remaining battalion of the Guards artillery took up a position on Kyurito Island, and the advance guard of the Twelfth Division attacked and forced back across the Ai River the Russian detachment at Litzuyen. By noon the main body of the Twelfth Division was in position about 2 miles east of and facing the Ai River.

A battalion of the Guards occupied Tiger Hill and the construction of the bridges at P, Q, and R (237, 310, and 90 meters long, respectively) was begun. The bridges were ready for use about 8 p. m.

At daybreak of May 1 the Twelfth Division was close to and facing the Ai River, its artillery being near Litzuyen, its right near Shalankou; a detachment was moving from Shalankou toward the Chingkou ford (this detachment took no part in the battle proper, not crossing the Ai until the Russians at Chingkou ford had been driven away). The Second Division was southwest of Tiger Hill. The Guards Division occupied a line from Tiger Hill north to Litzuyen, having followed the Second Division to Tiger Hill from its point of concentration. The reserve, 2 regiments of infantry, less 1 battalion each, and 2 of cavalry, was on Kyurito Island.

The Russian troops holding the right bank of the Ai River were commanded by Major-General Kashtalinski, and were distributed as follows:

At and near Chiuliencheng were the Twelfth Regiment, 1 battalion of the Eleventh Regiment, the Second Battery of the Third Brigade, and the machine-gun company.

At and near Potiehtun were 2 battalions of the Twenty-second Regiment and 6 guns of the Third Battery of the Sixth Brigade.

At Chingkou were one battalion of the Twenty-second Regiment and 2 guns of the Third Battery of the Sixth Brigade.

The remainder of the troops commanded by General Zasulich was distributed as follows:

At and near Antung were the Tenth and Twenty-fourth Regiments and the Second Battery of the Sixth Brigade.

At Tientzu, as general reserve, were the Ninth Regiment, two battalions of the Eleventh Regiment and the Third Battery of the Third Artillery Brigade.

The right flank detachment, under Major-General Mishchenko, was guarding the coast from the mouth of the Yalu to Takushan.

- The main body of the left flank detachment, under Colonel Trukhin, was at Hsiulun, guarding the road to Kuantien, with lesser detachments from the mouth of the Anping River, just above Suikouchen, to a point about 30 miles farther upstream.

At 5.20 a. m., on May 1, the Japanese opened fire on the right flank of the Chiuliencheng position from the 12 cm. howitzers. A little later the artillery of the Second Division, from west of Wiju, and that of the Twelfth Division, from near Litzuyen, opened fire. At 7 a. m. the 6 Russian guns northeast of Makou began firing on the Guards artillery.

At 7.30 a. m. the Japanese infantry moved forward. As it approached and was fording the Ai River it came under the fire of the Russian infantry and machine guns, and suffered considerable loss. The Russian artillery had ceased firing. The Twelfth Division made the more rapid progress in the series of attacks delivered from the base of the hills on the right bank of the Ai River, and the two battalions of the Russian Twenty-second Regiment holding the Potiehtun position were the first to give way. Their withdrawal was disorderly, the greater portion going toward Chingkou and thus exposing the left flank of the Chiuliencheng position. The battery took up a second position at "V," but having no infantry support and having lost heavily in men and horses, the 6 guns were abandoned to the Japanese. Shortly before noon Major-General Kigoshi's brigade, the right of Twelfth Division, drove back the battalion of the Twenty-second Regiment holding the Chingkou ford, and followed the retreating Russians toward Laofankou. At the same time the Japanese infantry resumed the assault on the left flank of the Chiuliencheng position, being aided by the artillery on Chukoutai Island. The troops holding the Chiuliencheng position then withdrew to the position at "Y" under cover of the fire of the machine gun company and that of the Second Battery of the Sixth Brigade, which had arrived from near Antung. The Japanese reserve arrived at Conical Hill, the Second Division was directed on Antung.

the Guards and reserve continued moving toward the Russian position at "Y" and toward Hamatan.

Hearing of the retreat of the battalion from Chingkou ford and the renewal of the Japanese advance near Chiuliencheng, Lieutenant-General Zasulich decided about noon to retreat to Fenghuangcheng. Two battalions of the Eleventh Regiment and the Third Battery of the Third Brigade were sent from the reserve to a position, designated by Major-General Kashtalinski, to the east of Hamatan. The two battalions took up positions facing east and north, but, finding the ground of such nature as to render artillery fire impracticable, Major-General Kashtalinski ordered the battery to withdraw.

By 1.45 p. m. the Japanese had pressed the Twelfth Regiment, the battalion of the Eleventh Regiment, and the machine-gun company back on the position at Hamatan. The Third Battery of the Third Brigade, which was endeavoring to carry out the order to withdraw, came under a cross fire at close range and was compelled to cease its withdrawal and take up a position. The machine-gun company took up a position and for a time held the Japanese back from this battery. In doing this the machine-gun company lost all of its horses and about half of its personnel. The Second Battery of the Sixth Brigade, which had aided in covering the withdrawal from the Chiuliencheng position, found its loss in horses so great as to prevent withdrawal of the guns from the position at "Y".

The Twelfth Regiment withdrew through the Hamatan position, which the Eleventh Regiment continued to hold for two hours more, thus facilitating the withdrawal of the Russians from the vicinity of Antung. In the meantime Major-General Kigoshi's brigade, moving from Chingkou, had a severe skirmish south of Laofankou, and 2 guns took up a position at "Z." The left of the Twelfth Division had moved from the Potiehtun position toward Hamatan.

At 4 p. m. the remnants of the Eleventh Regiment began to withdraw toward Fenghuangcheng, being assisted in cutting their way through by the fire of a battalion of the Tenth Regiment, sent from the reserve to hill 522 northwest of Hamatan.

The Japanese reported a loss of 5 officers and 218 men killed and 33 officers and 780 men wounded, and the capture of 22 field guns, 19 artillery ammunition wagons, 1,417 shells, 8 machine guns, 8 machine-gun wagons, 37,300 machine-gun cartridges, 1,021 rifles, 51 small-arms ammunition wagons, 353,005 rounds of small-arms ammunition, 63 horses, various minor articles, including some taken at Fenghuangcheng, and 18 officers and 613 men as prisoners.

Lieutenant-General Zasulich reported a loss on April 30 and May 1 of 70 officers and 2,324 men killed, wounded, and taken prisoners. Major-General Kashtalinski was among the wounded.

Another Russian report gives 28 officers and 564 men killed, 38 officers and 1,081 men wounded, and 6 officers and 679 men missing.

The Russians retreated on Fenghuangcheng and were followed by the Japanese First Army. On May 6 there were cavalry skirmishes northeast of Fenghuangcheng, which was that day occupied by a detachment of Japanese infantry. This advance was accompanied by extensive reconnaissance. Kuantien being occupied by a Japanese detachment on May 5, while on the 11th occurred a skirmish with a force from the Chita Regiment of Mishchenko's brigade, withdrawing westward.

On May 10 a detachment of Cossacks attacked Anju, having come down the Chosan-Anju road, but, after a skirmish lasting the greater part of the day and until the morning of the 11th, the attacking force was driven off by reinforcements arriving from Kasan. Had this attack been made just prior to General Kuroki's crossing of the Yalu and more vigorously pushed, it would undoubtedly have caused the Japanese commander considerable apprehension or even have delayed the crossing; but, as it turned out, the Japanese army had crossed the river and was no longer tied to its line of communications back through Anju, since reinforcements and supplies were now landed near the mouth of the Yalu.

An advance beyond Fenghuangcheng was not undertaken until other troops had landed and could move in cooperation with the First Army.

LANDING OF THE SECOND JAPANESE ARMY.

On May 5, 1904, the Second Japanese Army, commanded by General Oku and consisting of the First, Third, and Fourth Divisions and the First Artillery Brigade, began landing troops of the Third Division a short distance south of Pitsewo. On the 6th the First Division also began landing. On the 7th the place of disembarkation was shifted to a point about 7 miles southwest of Pitsewo. The landing was practically completed on the 13th. Lieutenant-Generals Fushimi, Oshimi, and Ogawa commanded the First, Third, and Fourth Divisions, respectively; Major-General Uchiyama, the artillery brigade.

This force had been in readiness for some time, the First Division having left Tokyo about March 19, and with the Third Division and First Artillery Brigade was ready for embarkation from Hiroshima on April 18. The Fourth Division began embarking at Osaka on April 22. The transports containing the Second Army concentrated at Chinampo, where they remained until the after First Army had crossed the Yalu.

To protect the landing and the large fleet of transports carrying the Second Army, Admiral Togo, in the early morning of May 3 made his third attempt to block Port Arthur, sending in eight vessels to be sunk in the channel for that purpose.

Two detachments were sent out from the Second Army on the 5th, one to Pitsewo, to cut the telegraph line running to Pulantien; the other, across the isthmus, to cut the railway and telegraph line at Pulantien (Port Adams), near the opposite coast. Both detachments succeeded. The Pulantien detachment arrived on the 6th, cut the railway and telegraph, and returned to rendezvous on the 7th. The cutting of the railway seems to have been confined to the destruction of a bridge.

On the afternoon of the 7th another detachment was sent out with the object of breaking the railway between Pulantien and Sanchilipu. On the 8th it cut the telegraph and railway near Lungkou, about 4 miles north of Sanchilipu, after a skirmish.

To gather information of the landing and guard the southern portion of the railway between Wafangtien and Chinchou,

there was sent to Wafangtien the Second Brigade of the Ninth East Siberian Rifles Division, the Second Transbaikalian Cossack Battery, and a squadron of cavalry, under command of Major-General Zikov.

Lieutenant-Colonel Spiridonov, with a platoon of the Fourth Trans-Amur Railway Battalion, repaired the railway bridge that had been destroyed on the 7th at Pulantien. This allowed a train load of ammunition to be taken to Port Arthur on May 10.

On May 12 another Japanese detachment cut the railway between Pulantien and Wafangtien, permanently suspending railway communication with Port Arthur.

On the 15th the greater part of the infantry of the Fourth Division and the Thirteenth Regiment of the Artillery Brigade moved to a position astride the railway and about midway between Pulantien and Chinchou. The First Division occupied a position astride the Pitzewo-Chinchou road and about 8 miles from Chinchou. The Third Division and army reserve occupied a position facing north on the hills south and east of Pulantien.

On the 16th there was a skirmish at Shisanlitai, north of Chinchou, where the troops of the Japanese First Division attacked a Russian force of 3 battalions and 8 guns. The Japanese drove the Russians back, losing 9 officers and 162 men killed and wounded, and the Fourth and First Divisions occupied Kiulichuang and hills to the north of Chengchiatun. The Russian force retreated on Chinchou, reporting the Japanese force at and near Sanchilipu to consist of 2 divisions and 6 batteries; the Japanese concluded that the Russian force in the vicinity of Chinchou and Nanshan, and commanded by Lieutenant-General Fock, consisted of the whole of the Seventh East Siberian Rifle Division and a portion of the Fourth East Siberian Rifle Division, subsequently placing the Russian force between 9,000 and 10,000 men. In this engagement the Russians lost 10 officers and 150 men killed and wounded.

On the 16th Rear-Admiral (the younger) Togo made a demonstration on the west coast of the peninsula, in the neighborhood of Kaiping, firing on some Russian troops near the coast. On the 17th he entered Chinchou Bay and fired on railway bridges and a military train.

On May 19 the Fifth Japanese Division began its disembarkation, which was completed on the 22d. The First Cavalry Brigade and the Eleventh Division arrived and disembarked shortly after the Fifth Division.

BATTLE OF NANSHAN.

(Plate II.)

On May 23 the Fourth, First, and Third Divisions, in the order named from right to left, concentrated in rear of the line Kiulichuang, Chengchiatun, Chaitzuho (southeast of Chengchiatun), and spent the remainder of that day and all the next in reconnoitering the Russian position.

On the 25th the Russians observed the Japanese forces for six hours from a balloon. The Japanese artillery fired at the balloon, but were unable to hit it, giving as a reason that the sky was overcast and the color of the balloon blended with that of the clouds.

On the 25th the Japanese advanced to Lungwangmiao, Sanlichuang, Chengchiatien, Wangchiatun, and that night small parties attacked Chinchou, which fell into their hands about 5.20 a. m. on the 26th. The attack was continued on the 26th, and, after a desperate struggle, Nanshan was occupied about 7 p. m., the Russians retiring toward Port Arthur.^a

Four Japanese vessels, the *Tsukushi*, *Heiyen*, *Akagi*, and *Chokai*, accompanied by a torpedo-boat flotilla, took part in the battle from Chinchou Bay, firing on the western portion of the Russian position, especially the heights of Suchiatun and later those of Nankuanling, the *Akagi* and *Chokai* being engaged throughout the day. The Russian gunboat *Bober* bombarded the Japanese left flank from Talienwan Bay on the 26th.

^a Japanese forces at Nanshan.

| Division. | Infantry regiments. | Cavalry regiments. | Artillery regiments. |
|----------------------------|--------------------------|--------------------|----------------------|
| 1st..... | 1st, 15th, 2d, 3d..... | 1st..... | 1st. |
| 3d..... | 6th, 33d, 18th (34th) .. | 3d..... | 3d. |
| 4th..... | 8th, 37th, 9th, 38th .. | 4th..... | 4th. |
| 1st Artillery Brigade..... | | | 13th, 14th, 15th. |

The Thirty-fourth Infantry, 2 squadrons and 1 artillery battalion of the Third Division, and 1 battalion and 2 squadrons of the Fourth Division were with the Fifth Division holding the line from Pulantien to the Tasha River. The companies of the Fifth Engineer Battalion were present at Nanshan.

Combatant strength, 38,740; total strength, 53,740.

The engagement of the 25th was mainly an artillery duel. The 26th also opened with an artillery duel at about 5.30 a. m. At 6 a. m. the infantry of the Fourth Division advanced west of Chinchou, the extreme right wading through the waters of the bay, reaching a line west of Liuchiatien about 8.30 a. m. Then the infantry of the First Division moved forward and prolonged this line east through Liuchiatien and then southeast. About 7.50 a. m. the infantry of the Third Division began moving forward and prolonged the line of the First Division, its own left resting near Liuchiakou. The Japanese artillery, which had obtained the mastery over the Russian artillery after firing about one hour, also advanced nearer to Nanshan. Two Russian field batteries retired to an elevation east of Nankuanling, from which they maintained a persistent fire on the Third Division. In addition the Russians strengthened their right, and, with the aid of the gunboat *Bober*, inflicted great loss on the left of the Third Division.

From 9 a. m. to 6 p. m., notwithstanding the Russian artillery at Nanshan proper had ceased firing, repeated attacks of the Japanese infantry were repulsed by the Russian infantry and machine-gun fire, and with the exception of small attacking parties the Japanese line remained practically stationary at about 500 yards from the Russian trenches. About 6 p. m. the Fourth Division began moving forward, assisted by its artillery and the fire of the vessels in Chinchou Bay. The Seventh Brigade advanced its extreme right so far as to practically turn the position. The Russians then began their withdrawal. The Fourth Division then reached the Russian position about 7.10 p. m. and was closely followed by the First and Third Divisions.

Not only was the Fourth Division aided by the fire of the vessels, but it was confronted by the weakest portion of the Russian position. The greater portion of the defensive works faced the east, northeast, and north.

General Oku reported casualties as follows: Officers, 21 killed and 100 wounded; noncommissioned officers, 5 killed and 12 wounded; privates, 713 killed and 5,343 wounded—a total of 739 killed and 5,455 wounded.

General Stoessel reported a loss of about 30 officers and 800 soldiers killed and wounded.

General Oku reported the capture of about 68 cannon, 10 machine guns, an electric battery, 3 searchlights with dynamo, 50 mines, a quantity of rifles and ammunition; also that his army buried the bodies of 10 officers and 664 men of the Russians at Nanshan.

On the 27th the Japanese occupied Nankuanling. On the same day a detachment occupied Liushutun (the terminus of the Talienwan branch railway), securing 4 guns, some ammunition, and 45 freight cars. The Russians on the same day evacuated Dalny, which was occupied by the Japanese on May 30.

On this latter day an engagement occurred at Lichiatun, 22 miles north of Pulantien, between the First Cavalry Brigade and a Cossack brigade under Major-General Simonov. On the 3d of June there was another skirmish near Chinchiatun, and again on the 4th, south of Telissu at Chienshiatun. These skirmishes were between reconnaissance parties of the Japanese Fifth Division and its attached troops, holding the Pulantien-Tasha River line, on one hand, and the advance guard of General Stackelberg on the other, the latter having begun concentrating his troops from Yingkou and Kaiping to aid the Port Arthur garrison, the advance guard of 2 regiments of infantry, 2 regiments of cavalry and 8 guns arriving at Mauchialing, Telissu, and Wafangtien between May 28 and 31. The Japanese First Cavalry Brigade retired before this advance guard, arriving near Pitsewo June 6.

General Stackelberg had under his command the First and Ninth East Siberian Rifle Divisions with their accompanying First and Ninth East Siberian Artillery Brigades (First Siberian Corps), the Second Brigade (Glasko) of the Thirty-fifth Infantry Division with its accompanying half of the Thirty-fifth Artillery Brigade, the Ninth (Tobolsk) Siberian Infantry Regiment (from the Third Siberian Division), one brigade of the Siberian Cossack Division, the Ussuri Mounted Brigade (2 sotnias of Frontier Guards and the Primorski Dragoon Regiment), a Frontier Guard battery, the Second Trans-Baikal Cossack Battery, and the East Siberian Sapper Battalion; a total of 36 battalions, 20 sotnias and squadrons, and 98 guns, with a possible strength of 42,000 foot and 3,000 mounted men.

BATTLE OF TELISSU OR WAFANGKOU.

(Plate III.)

On June 6 the troops already landed and still landing near Pitsewo were divided into two armies. The First Division, reenforced by the Ninth and Eleventh Divisions, became the Third Army, and later moved on and besieged Port Arthur. General Oku, with the Third, Fourth, and Fifth Divisions, the First Cavalry Brigade, and First Artillery Brigade, started north on June 13 from near Pulantien, the Third Division and artillery brigade (less one regiment) moving along the Tasha River, the Fifth Division along the railway line, the Fourth Division and Fourteenth Regiment (artillery brigade) along the Wuchiatun-Ssuchuankou-Tahoya road leading toward Fuchou, and the cavalry brigade along the Pitsewo-Hsiung-yocheng road. The Sixth Division began landing at Pitsewo on June 13, and a portion arrived near Telissu during the battle, thus bringing the Japanese total to about 50,000 men and 180 guns.

The Third Division came into contact with the Russian advance guard, which had retired from Wafangtien, on the afternoon of June 14 and drove it back. The Russian guns northeast of Lungwangmiao then opened a fire that was replied to by the Third, Thirteenth, and Fifteenth Japanese artillery regiments for about two hours. The first line of the Japanese Third Division, after some skirmishing, reached a line through heights 987, 962, the one northeast of and next to 962, and 1400. The advance guard of the Fifth Division took part in this engagement, advancing until its right rested on height 700 and its left on the Fuchou River.

General Oku ordered the Third Division to hold the line of its advance guard. The Fifth Division during the night was sent to occupy the hills west of Tayankou with orders to attack at dawn. The Fourth Division was at Nachialing; the troops of the Sixth Division that arrived were held in reserve. The First Cavalry Brigade was at the crossing of the Tasha River on the Pitsewo road.

To meet the Japanese advance, General Stackelberg had placed the Thirty-third and Thirty-sixth Rifle Regiments and 2 batteries on the heights north of Tafangshan, the Fourth and Third, in order named, 2 field batteries and 1 mountain

battery to the east of the railroad; the Thirty-fourth, the Thirty-fifth, and 2 batteries in reserve between Telissu and the station; the brigade of the Thirty-fifth Division about 1 mile east of the station. When the Russian advance guard was driven back on the 14th, the First and Second Rifle Regiments prolonged the main Russian line to the east, the cavalry of the advance guard, under Major-General Simonov, retired to and took position at Lungkou.

Early in the morning of June 15, leaving the Fourth Regiment to hold about 2 miles of the line east of the railway, the First, Second, and Third Regiments moved forward against the Japanese left. The brigade of the Thirty-fifth Division, under Major-General Glasko, was to move by way of Chingchiatun and make a flank attack in conjunction with this attack of the First Division, but, from not starting at a sufficiently early hour and from taking the wrong road either through inadvertence or the misinterpretation of an order, did not arrive on this part of the field until 11 a. m.

In the meantime the Japanese Fifth Division attacked the heights of Tafangshan and, at 6 a. m., the advance of the Fourth Division, from Nachialing, began forming for an attack on Lungkou. By 10 a. m. the Nineteenth Brigade, Fourth Division, had driven the Russian cavalry to north of Lungkou and was in position with its right connecting with the left of the Fifth Division near Wangchiatun, while the remainder of the division had taken position, facing north, south of Kaochiatun. About 10.30 a. m. General Stackelberg sent the two reserve regiments, Thirty-fourth and Thirty-fifth, to attack the Japanese at Lungkou. The attack of the Japanese Fifth Division, aided by the fire of the artillery brigade and by the Nineteenth Brigade on the heights west of Wangchiatun, had progressed so far that the Russians began to withdraw from the heights of Tafangshan about 11 a. m.

By this time the attack of the Russian left had approached close to the Japanese right, and was now prolonged by the arrival of Major-General Glasko's brigade. The Japanese right was, however, after having a portion driven back to the height south of Sungchiatun, reinforced by troops from the general reserve, thus relieving the condition of the Third Division. The Japanese Third Cavalry Regiment, dismounted, was on the right of the Third Division and the

First Cavalry Brigade, also dismounted, attacked the extreme Russian left, but made little progress. The fight on this part of the field continued, the Japanese being again reinforced from the general reserve, until the order to retreat reached the Russian forces, about 3 p. m., although the Fourth Rifle Regiment, the right flank of which was exposed by the Russian withdrawal from the heights of Tafangshan, had given way before the attack of troops from the Third and Fifth Divisions, about 2 p. m. The Russian guns on the heights of Lungwangmiao had ceased firing about noon and were abandoned when this retreat occurred. During this period a Russian battalion made an attack on the height south of Sungchiatun and reached the Japanese line. Desperate hand to hand fighting resulted, in which the Russian battalion was practically annihilated after the remnants had continued the struggle until nearly dark.

The Thirty-fourth and Thirty-fifth Rifle Regiments were unable to recapture Lungkou, but had succeeded in holding back the Japanese advance on that part of the field, and inflicted severe loss on the Nineteenth Brigade. The main body of the Fourth Division moved from Kaochiatun, drove the Russian cavalry still farther north and sent two companies and a battery to the heights east of Lungchiatun (about 8 miles northwest of Telissu), from where they were able to fire upon and severely injure a detachment of Russian cavalry retiring by the Lungkao River road.

The retreat of the Russians was covered by the Tobolsk Regiment, which arrived at Telissu station by rail while the battle was in progress.

The Russians reported a loss of 18 officers killed, 85 wounded, and 10 missing, 459 men killed, 2,155 wounded, and 754 missing.

General Oku reported a loss of 7 officers and 210 men killed, and 43 officers and 903 men wounded. He reported also the capture of 300 prisoners, including 6 officers, a regimental flag, 16 field guns, 46 ammunition wagons, 953 rifles, 37,233 rounds of small-arm ammunition, 1,121 rounds of artillery ammunition, 232 sappers and miners' tools, 1,110 barrels of cement, and other weapons, utensils, etc.

By June 21 Stackelberg had reached Kaiping (Pl. IV), with his rear guard at Senucheng, about 18 miles farther

south, and in contact with the Japanese advance guard, which on that day occupied Hsiungyocheng.

General Oku began now to reconnoiter to the east with the intention of establishing communication with the Japanese Fourth Army, which had begun landing at Takushan on May 19 and had reconnoitered north toward the First Army in the vicinity of Fenghuangcheng and northwest toward Kaiping.

On July 6 a portion of Oku's army attacked and drove back a regiment of Russian infantry on a mountain ridge about $2\frac{1}{2}$ miles northeast of Ssufangtai and a second ridge about $2\frac{1}{2}$ miles north of the same place. At the same time the main force of the Japanese army pushed northward, the opposing cavalry falling back to line of the Erhtao River through Kinchiakou and Hsiaolanchi, the Japanese left wing occupying the heights of Tsuchiatun.

Continuing the advance on July 7 the Japanese army by noon had reached a line extending from Tatzukou to the heights east of Tawanghaisai, the Russian rear guard slowly retiring northward, delaying the advance. The main Russian force was north of the Kaiping River, its artillery being posted on the heights north of Kaiping and those to the west of Hsitai, its right wing resting on the heights of Haishansai, and a detachment of the left wing as far to the east as Huahungkou.

On July 9 the Japanese cannonaded the Russians, who, about 8 a. m., withdrew their artillery to the heights of Shimen and Haishansai, the Japanese occupying the heights of Tapingtun, Tsuchiatun, and Tungshuangtingshan. About noon the Japanese attacked and carried the second Russian position, the artillery of the latter retiring to the heights of Hungchichang, Yaolingtzu, and Shinfotzu and covering the retreat. The Russian forces from Hungchichang and Yaolingtzu concentrated near Tapingchuang on the 10th and subsequently retired to Tashihchiao, the junction of the Port Arthur-Liaoyang Railway with that running to Yingkou.

The Japanese casualties in the neighborhood of Kaiping on July 6 to 9 were 24 killed and 129 wounded; Major-General Koizuma, Major Iwasaki, Lieutenants Iwayama, Morita, and Taniguchi being among the wounded.

The Russian loss was light, not exceeding 200. The

engagement was practically an artillery fight on both sides, General Stackelberg being unable to make a determined stand at Kaiping without imperiling his line of communications, which was threatened by the Takushan army.

The occupation of Kaiping and the country immediately to the north placed General Oku's army on the edge of the Liao Valley, opened the way to Yingkou and Newchwang, and facilitated his further advance to the north by allowing supplies to be received from the sea, thus shortening his line of communications.

OPERATIONS ON THE KUANTUNG PENINSULA.

(Plate V.)

On May 27, the day following the battle of Nanshan, a portion of Major-General Nakamura's (Second) Brigade, First Division,^a occupied Nankuanling, while the main force of the Second Army remained in the villages near Nanshan. The Russians burned the station of Sanshilipu and retired westward.

On the same day a detachment of Nakamura's brigade occupied Liushutun, capturing 4 guns with a quantity of ammunition for the same, 5 box and 40 open freight cars.

On May 29 and 30 General Nogi's army continued to advance westward, and on the latter day occupied a line extending from Antzushan to Taitzushan, the Russians occupying a line through Shuangtaikou and Antzuling.

On May 30 the Japanese occupied Dalny, which had been evacuated by the Russians, capturing about 300 open and 120 box cars, 50 lighters, 2,000 tons of coal and 20,000 railway ties. All the smaller railway bridges in the neighborhood had been destroyed as had also a portion of the larger pier, while three small vessels were found sunk near the entrance and the bay liberally sown with mines. The docks and smaller pier were uninjured.

^a The First Division was now being reenforced by the Eleventh Division, which began to land at Pitsewo on May 24, and was later reenforced by the Ninth Division which landed at Dalny about June 15; also by the Seventh Division, the First and Fourth Kobi Brigades, the Second Brigade of field artillery, 7 battalions of siege artillery, a naval brigade and an engineer and artillery park; the whole forming the Third Army under General Nogi with Major-General Idichi as Chief of Staff.

The occupation of Dalny was of great benefit to the Japanese, as it gave them an excellent harbor which, with Liushutun, served as a base for the Third and Second Armies. There were at Dalny over 100 barracks, storehouses, etc., remaining in good condition. The removal of the mines that had been laid by the Russians cost the Japanese considerable time and labor. By the aid of a pilot who had been in the Russian service a fairway was found on June 6, up to which time 41 mines had been discovered and destroyed.

The Russians, holding Shuangtaikou and Fenshuiling in force, advanced their outposts to within 1,000 yards of the Japanese outposts and began to fortify the northeastern foot of the hill east of Shihshankou and the line of heights running north and south through Antzuling from Chengerhshan to east of Poshan.

On June 13 the Fifth and Twenty-eighth East Siberian Rifle Regiments made a vigorous reconnoissance from Chakou and Chuchuantzukou, that did not cease until dark.

On June 14 the *Novik* and two gunboats bombarded the Japanese left flank for about forty minutes from off Heishih-chiao. The *Novik* and 10 destroyers had issued from Port Arthur that morning and driven off the Third Destroyer Flotilla, Commander Tsuchiya, which had been bombarding the Russian right in the vicinity of Hsiaopingtao.

On June 18 a Russian flotilla appeared in the vicinity of Hsiaopingtao and began firing at the Japanese left flank, but was driven off by a Japanese squadron after an engagement of about thirty minutes.

On June 26 the Eleventh Division and the left of the First Division moved forward to occupy higher ground from which the Russians could observe Dalny, and which, if captured, would allow the Japanese to overlook the Russian positions.

The detachment of the First Division attacked and occupied the heights west and south of Pantao.

The Eleventh Division attacked in three detachments; the right moving on the heights east of Lannichiao, the center on the heights called Kensan, or Sword Hill, by the Japanese, the left on Shuangtingshan.

The main resistance to this advance was at Kensan, held by one battalion with a number of machine and quick-firing guns, which was captured by the Forty-third Regiment only after a

stubborn fight lasting until about 5 p. m. The Japanese captured two 6 cm. quick-firing guns and some 200 shells.

As a result of the advance, the Japanese first line extended from Antzushan through the heights about 1 kilometer west of Pantao, Kensan, and Shuangtingshan.

By June 30 the Russians extended their defensive works in the neighborhood of Antzuling from the southern extremity of the heights to the summit of Kabutosan, and had constructed works on the heights north and south of Wangchiatum. They also continued to strengthen the works at Shuangtaikou, where one or more searchlights had been installed.

On July 3 the Russians began a series of attacks that extended through three days. Shortly after noon two companies attacked in the direction of Kensan. About 4.30 p. m. these companies were reenforced and made an attack on Kensan, but were repulsed. About 5.20 p. m. 4 guns took up a position west of Tashihtun and covered the withdrawal of the infantry. About 8.30 p. m. a battalion attacked from the direction of Taposhan, but was repulsed by a counter attack. The Russian force in this vicinity consisted of about 2 battalions, 12 field and 2 machine guns.

A small force of infantry also advanced toward Laotaoshan at 6 a. m., and began skirmishing with the Japanese outposts, driving the latter back between 1 and 2 p. m. About 3.50 p. m. a small force began to advance along the valley north of Laotaoshan, but came under the fire of a Japanese battery and retired. About 6.30 p. m. a battalion deployed south of Laotaoshan and opened fire. A few minutes later 4 guns took up a position north of Laotaoshan and opened a telling fire on the left of that portion of the Japanese position. The Japanese artillery replied and the firing continued until after dark.

On July 4, at 5 a. m., a small force of Russian infantry drove back the Japanese patrols in and north of Wuchia-yingtzu. About 9 a. m. another force opened fire from a hill about 2,000 meters south of Chakou, while yet another force on a hill north of that village opened fire on the Japanese positions west of Pantao; this fire continuing during the day. South of these detachments was another Russian detachment throwing up trenches, about 1,500 meters southeast and east of Nanchakou.

Between 1 and 2 a. m. a small force of Russians made an attack on Kensan. At 6 a. m. the attack was renewed on Kensan and the heights about 3,000 meters to the southeast, the attacking force being increased to about 1 battalion of infantry, assisted by the fire of a battery in the valley west of Wangchiatun. By 7 a. m. the attacking force, increased to about 3 battalions, had approached to within 800 meters. Several unsuccessful attempts to assault were made between that time and noon, at which time the attacking force had increased to 7 battalions, while 2 more battalions were attacking Kensan from the west. At 3.50 p. m. the Russian artillery increased its fire and the infantry again took up the assault with a force of about 10 battalions. So strong was the assault that the general reserve was sent forward and placed under the orders of the commander of the left wing (Eleventh Division), while 3 batteries of heavy guns, just arrived, were pushed forward to Pantao and two others to Huangnichuangtashantun. The heavy naval guns also participated in the fight on this part of the field, which continued during the night.

In the meantime heavy fighting had been going on still farther south. At 6 a. m. the Japanese artillery opened fire on the Russian positions on the north crest of Laotaoshan, to which the Russians, after attempting to reply with artillery fire, replied by advancing the infantry from these positions in an attack on the Japanese line. At 11.30 a. m. the Japanese were compelled to send their reserves into the firing line. At 5 p. m. the Russian artillery on Laotaoshan again opened fire, which was joined in by a Russian vessel off Hsiaopingtao.

On the morning of July 5 the Russians made a couple of demonstrations against the Japanese in the neighborhood of Pantao. At 10.30 a. m. a company of Japanese infantry attempted to seize a small height southwest of Kensan, but was repulsed. Shortly after noon the Russians made a demonstration against Kensan.

At the end of the three days' fighting the Russians held a fortified line through Shuangtaikou, Antzuling, and the heights east of Lungwang River.

The Japanese held one line from near Antzushan to the crest of the heights northeast of Hanchiatun, to a point 2,000

meters southeast of Lannichiao, and another from the high ground south of Lannichiao, via Kensan and Huangnichuang-tashantun, to Shuangtingshan.

On July 7, 8, 12, 17, 18, and 22, there were small reconnaissances by the Russians. On July 10 the Japanese established on the heights east of Lannichiao a battery of 12 guns that had been captured at Nanshan, and a battery of 6 heavy naval guns about 1,500 meters west of Chuchuantzukou.

By July 23 the Ninth Division had completed its landing, begun by the main portion at Dalny about the 15th, and had joined the First and Eleventh Divisions, taking the center of the line. The First Kobi Brigade had landed and joined the First Division.

At 7.30 a. m., on July 26, the Japanese began a general attack in which the Russian artillery maintained the ascendancy. However, the Japanese infantry moved forward about noon, and at dark the First Division had advanced nearly to Yingchengtzu, the Ninth Division nearly to Pienshihpentzu, and the Eleventh Division nearly to Taposhan.

At 6 a. m., on the 27th, the Japanese artillery again opened fire, and the First and Ninth Divisions advanced on the salient, whose apex was Ojikeisan. The Russian fire was withheld until their opponents were within close range. A portion of the assaulting infantry was protected from frontal fire by the steepness of the ground, but was subjected to a severe flank fire from other portions of the Russian position and suffered severely. After repeated assaults a portion of the salient was captured about 3 p. m., but the Russians continued to hold the remainder.

The attack of the Eleventh Division on the heights east of the mouth of Lungwang River was not only stubbornly resisted by the defenders, but the assailants were subjected to the fire of several Russian vessels near Lungwangtang. An assault was made about 5 p. m. but failed. Another assault was begun from three sides shortly after midnight and the hill carried about 5 a. m. on the 28th.

The attack of the First and Ninth Divisions was resumed at dawn of the 28th, and at 9 a. m. the Russians began to withdraw. By night the Japanese had occupied a line through Tungchanglingtzu and Yingkoshih, having captured 2 heavy, 3 field, and 3 machine guns.

On July 30 the Japanese again advanced, the First Division southwest along the Port Arthur road, the Ninth toward Kantashan, the Eleventh toward Takushan. By 11 a. m. they occupied a line from the heights south of Tuchengtzu to those east of Takushan. Hsiaokushan and Takushan remained in the hands of the Russians, who, at other points, had withdrawn across the road leading through Lichiatun.

The Japanese estimate the Russian killed and wounded from July 26 to 30 at about 1,500. An unofficial statement places the Japanese loss at 670 killed and 3,334 wounded, including 25 officers killed, one of which was a colonel of artillery, and 116 wounded, one of which was a colonel of infantry.

On August 1 and 2 the Russians bombarded the Japanese and made several attacks but did not succeed in recovering any ground.

On August 7 the Japanese began a bombardment of Takushan at 4 p. m. At 7.30 p. m. the Eleventh Division, during a high wind and heavy rain, attacked the heights, and at midnight succeeded in occupying the foothills of Takushan. On the morning of August 8 seven Russian vessels approached Yenchang and by a flanking fire greatly aided the Russian force. In the afternoon the Japanese artillery drove the vessels away and resumed the bombardment of the Russians remaining on Takushan. Toward evening the Japanese infantry again attacked and succeeded in occupying the summits about 8.30 p. m. The Japanese loss was about 1,400 killed and wounded.

Continuing the attack during the night, the Forty-third Regiment and part of the Twelfth occupied Hsiaokushan at 4.30 a. m. on August 9. Both Takushan and Hsiaokushan were severely bombarded by the Russians shortly after noon on the 9th, the vessels again appearing off Yenchang and taking part in the bombardment; at 1.30 p. m. a Russian battalion attacked the two heights. The engagement lasted until night and the Japanese suffered severely, but succeeded in holding their positions. The Russian vessels were finally driven into the harbor by some vessels from the blockading squadron.

During the day the Japanese naval battery bombarded

Port Arthur and the harbor, sinking one vessel and striking the *Retvizan*.

In the early morning of August 10 the Russians opened a severe fire from the forts south of Tungchikuanshan. Otherwise the 10th, 11th, and 12th passed with only the ordinary exchange of gun fire. On the 10th the Japanese again endeavored to reach the Russian battle ships in the western harbor with the fire of the naval battery, but did not succeed in striking any of the vessels.

On August 13 a Russian advance post set fire to and evacuated Wuchiafangtzu.

On August 14 the First Division attacked and succeeded in advancing to a line extending from Kantashan to the heights west of Suichiatus via the high ground north of Suichiatus. The attacking force was compelled to retire by the Russians, who were aided in their counter attack by the fire of their batteries on the heights between Hsiaotungkou and Nienpankou. The Japanese again approached during the night, and on the morning of the 15th again attacked and at 11 a. m. succeeded in making a lodgment on these heights.

The conclusion of this attack left the Japanese in front of the land defenses proper of Port Arthur. These defenses, divided into eastern and western sectors by the valley through which the railway enters the town, consisted of permanent masonry forts whose gorges were connected by the old Chinese Wall, temporary works constructed just prior to and during the siege, and connecting and advance trenches. The west sector followed an irregular crest, with an elevation of about 500 feet, around the new town and terminated on Laotiehshan, the highest point in the vicinity, with an elevation of about 1,000 feet. The east sector encircled the old town at a distance of from 2 to 2½ miles, running along an irregular crest, about 350 feet in elevation, within which was an elevation (Wangtai or Signal Hill) of about 800 feet. The permanent forts were polygonal in trace and had ditches with caponiers and galleries. The gap between the two sectors was covered by the fort on Paiyushan (Quail Hill).

Of the works most intimately connected with the siege the Sungshushan, Erhlungshan, North and East Tungchikuanshan, Itzushan, and Antzushan forts were strong, permanent

fortifications. The two Panlungshan forts, East and West, were semipermanent, redoubt-shaped fortifications. 203 Meter Hill and Akasakayama were semipermanent works, with two lines of advance trenches. Kuropatkin Fort was a strong fieldwork, with deep ditch; the Shuishihying lunettes were also provided with ditches, but not so deep. P., H., Kobu, and Hachimakiyama were more in the nature of semipermanent trenches with bombproofs.

On August 16 the Japanese sent, by Major Yamaoka, a note, under a flag of truce, demanding the surrender of Port Arthur and inclosing an offer to allow the noncombatants, such as women, children, priests, diplomats of neutral countries, and military attachés, to proceed to Port Dalny.

On August 17 the Russian refusal to surrender was sent to the Japanese. The offer to noncombatants was not accepted.

On the morning of August 19 the Japanese began a general attack. The First Division attacked and effected a lodgment on 174 Meter Hill and Namakayama, where it was twice counter attacked in the afternoon and driven back. The Third Regiment carried one of the Shuishihying lunettes, but was unable to hold it. The Ninth and Eleventh Divisions, acting together, advanced and passed the night on a line from north of Wuchiafangtzu through the heights north of Wangchiatun to the western foot of Hsiaokushan.

On August 20 the First Division and First Kobi Brigade completed the occupation of 174 Meter Hill, the First and Fifteenth Regiments making the assault. The Ninth and Eleventh Divisions were unable to make any progress, not only on account of the Russian fire, but also because of the extensive wire entanglements in front of Panlungshan and North Tungchikuanshan. They did make some progress in the destruction of the entanglements. Troops of the Thirty-sixth Regiment entered Kuropatkin Fort after severe fighting, but were driven out shortly afterwards.

On August 21 troops of the Ninth Division, reenforced by the Fourth Kobi Brigade, charged East Panlungshan Fort in the early morning, but were repulsed. Troops of the Eleventh Division at the same time charged North Tungchikuanshan Fort and succeeded in capturing an advanced work 200 meters farther to the southeast. They were subjected

to such a severe fire from the neighboring forts that they were driven from the advanced work about 9 a. m. The Russians made a counter attack north of Shuishihying, but were driven back.

The attack was continued on the 22d. At 9 a. m. the Sixth Brigade, Ninth Division, had captured a portion of East Panlungshan Fort when they came under a severe fire from West Panlungshan Fort. Two companies, sent forward from the reserve during the afternoon, assaulted and, after a severe fight, drove the Russians from the latter fort. This indirectly aided the troops attacking the east fort, from which the Russians were driven shortly afterwards. The Russians attacked both of these forts several times during the night, drove the Japanese down the slopes, and were in turn driven back by the Japanese who succeeded in holding the parapets and keeping the Russians in rear of the gorges.

On the 23d the Ninth and Eleventh Divisions made a night attack on the height (H) northwest of Wangtai, Wangtai and North Tungchikuanshan Fort. A portion of the Ninth Division succeeded in reaching the heights northwest of Wangtai. This attack was met, about 11 p. m., by a strong sortie in the neighborhood of Panlungshan, in which the Russians drove back those Japanese who had crossed the Chinese Wall behind the Panlungshan forts at the foot of Wangtai and passed beyond the line of forts. After severe fighting the sortie was repulsed, the Japanese retaining possession of the Panlungshan forts. While this sortie was in progress troops of the First Division attacked Itzushan Fort, but were repulsed with heavy loss.

On August 24, in the early morning, the Ninth Division continued the attack on the height northwest of Wangtai, while the Eleventh Division attacked Wangtai and North Tungchikuanshan forts. Both attacks failed and may be said to conclude the general attack, begun on August 19, which is said to have cost the Japanese over 15,000 in killed and wounded.

On August 28 the Russians began strengthening the Chinese Wall and the works in the neighborhood of Wangtai, mounting two heavy guns and bringing up field guns to fire on the two Panlungshan forts, now held by the Japanese.

On August 29 the Russians began firing with these heavy guns against the two Panlungshan forts and, about 11 p. m., a small force made a sortie against the west fort, but was repulsed.

On September 2 the First Division opened a heavy fire on Port Arthur with its field and naval guns. The Russians continued their daily bombardment of the two Panlungshan forts. They continued this bombardment on the next day and destroyed the greater part of the works the Japanese had constructed there. The bombardment was continued daily and was particularly violent on September 6, resulting in the demolition of the works that had been again constructed by the Japanese.

Toward midnight of the 6th a small party of Russians made a sortie against the extreme right of the Japanese line, but was repulsed. Another small party made a determined sortie against the Japanese center and, although finally driven back, completely demoralized the siege operations of the Japanese in that vicinity.

On September 8 the Russians directed a desultory fire against the Panlungshan forts and a more vigorous fire against the sapping operations, making several sorties against the same at night.

By September 9 the Japanese approaches had reached to within 50 meters of Kuropatkin Fort and 300 to 400 meters of the two Tungchikuanshan forts. By the 11th of September the Japanese approach had reached to within 70 meters of the forts south of Shuishihiying. These approaches were fired on daily by the Russian artillery.

On September 12 small parties of Russians made two sorties against the approach to North Tungchikuanshan Fort, but were repulsed. Other sorties were made as follows: On September 13 near Shihchiaio; on the 15th against the approaches to Kuropatkin, Shuishihiying, and Hachimakiyama (east of Erhlungshan) forts; on the 16th two against the approach to Kuropatkin Fort, and on the 18th against the approach to the Shuishihiying forts. All these sorties were made by small parties consisting of from 40 to 70 men, and toward the end the use of hand grenades by the Russians began.

On September 19, about 2 p. m., the Japanese opened fire

with their siege and naval guns. Toward the evening the fire was concentrated on Kuropatkin Fort, the Shuishihying lunettes, Namakayama, and 203 Meter Hill. The attack was then begun and continued all night. Troops of the Ninth Division attacked Kuropatkin Fort while troops of the First Division and the First Kobi Brigade attacked the other points mentioned. The Japanese carried Kuropatkin Fort at dawn of the 20th, the Shuishihying lunettes about noon, and Namakayama with its two works about 6.30 p. m. At 8 p. m. one company effected a lodgment on the northwest slope of 203 Meter Hill and about midnight the southwest summit of the hill was carried. The fire from Antzushan and Itzushan forts compelled the Japanese on Namakayama to withdraw from the plateau to the upper trench.

The Russians reinforced their troops on 203 Meter Hill, and desperate fighting was continued until the evening of September 22, when the Japanese were compelled to withdraw from the hill, having lost about 2,500 killed and wounded.^a General Yamamota, commanding First Brigade, was among the killed.

At about 8.30 p. m. on September 25 the Russians concentrated a strong fire against the approach northeast of Erhlungshan Fort and a body of about 30, covered by the rifle fire of about 100 of their comrades, made a determined attack, the fight lasting for about thirty minutes and the opponents coming to hand to hand encounter. The Russian party left 20 killed before it retired.

In the early morning of September 27 the Russians concentrated a severe fire on the approach northeast of Erhlungshan Fort and made two sorties against the same.

From September 28 the fire of the siege and naval guns was directed daily against the Russian vessels in the harbor; the *Peresviet*, *Poltava*, and *Pobieda* were struck several times.

On October 2 the Russians made a strong sortie against the approaches to the Tungchikuanshan forts, which began about 7.30 p. m. and continued until after midnight, when the sortie

^a From the 1st of June to the 30th of September the besieging army is said to have lost 23,500 killed and wounded, 20,000 from beriberi, and 5,000 from typhoid and dysentery.

was repulsed. At the same time a battalion made a sortie against the right of the Japanese siege line, but retired after an engagement of about one hour.

On October 4 a party of Japanese attacked a Russian position south of Yenchang, dismantled a 47 mm. quick fire and a machine gun that had been harassing the working parties in the approaches, and returned to its position at the foot of Takushan. During the night the Russians made several sorties against the approaches to Erhlungshan.

On October 7 the Japanese reported that in the bombardment they had maintained from the 1st to 7th with their siege and naval guns the siege guns hit the *Pobieda* once, the *Retvizan* four times, and the *Poltava* five times; also that several vessels were hit by the naval guns; that the crew of the *Poltava* was landed on the 6th, that of the *Retvizan* on the 7th.

On the night of October 10 the Russians made several sorties against the two Panlungshan forts. They also continued their nightly practice of throwing grenades into the approaches to Tungchikuanshan Fort. The grenades were first thrown by hand. Later the Russians made use of a wooden gun for the purpose and the Japanese resorted to the same expedient.

On the afternoon of October 11 nine Russian torpedo boats twice reconnoitered off Yenchang, exchanging fire with the Japanese torpedo boats and batteries, and retired to the harbor.

At 7 p. m. on that day three companies of Japanese infantry captured the railway bridge south of Lungyen and intrenched at a point 200 meters farther to the front.

On October 12 to 15 the siege and naval guns continued firing at the vessels in the harbor and succeeded in setting the *Peresviet* on fire, causing the vessel, in the opinion of the Japanese, to lose her fighting capacity. On the night of the 12th the Russians threw over 50 grenades into the Japanese trenches.

On October 16, about 4.30 p. m., the Ninth Division attacked and captured the Russian trenches on the glacis of Erhlungshan and entered Hachimakiyama Fort (east of Erhlungshan Fort). The Russians retained possession of the gorge and converted it into a defensive work. The Japanese

captured 1 field gun, 1 small caliber gun, 2 machine guns, some rifles and a quantity of ammunition.

In the early morning of October 17 a small force of Russians made a sortie from 203 Meter Hill and threw grenades into the Japanese trenches. About the same time sorties were made in the direction of Hachimakiyama and from Erhlungshan.

For several days the Japanese kept up a desultory bombardment covering their siege operations, which were obstructed by the Russians, who resorted to small sorties, hand grenades, and bombs thrown by wooden guns. By October 23 the approaches were within 50 meters of North Tungchikuanshan Fort; on the 24th they were within the same distance of Erhlungshan Fort. On the 23d the Russians, who had been countermining from North Tungchikuanshan Fort, blew up the head of the Japanese tunneled approach.

On October 25 the Japanese naval guns sank a two-funnel three-mast ship in the harbor.

On the morning of October 26 the Japanese began with their siege and naval guns a heavy bombardment of the Sungshushan, Erhlungshan, and Tungchikuanshan forts. From 2 p. m. the bombardment was extended to the trenches on the glacis of Sungshushan and Erhlungshan forts and the trenches south of Hachimakiyama Fort. At 5 p. m. a force from the First Division attacked Sungshushan and a force from the Ninth Division attacked Erhlungshan and the trenches south of Hachimakiyama. The attacking forces occupied the trenches on the glacis of Sungshushan and Erhlungshan and those south of Hachimakiyama. The attack was then subjected to a severe fire from not only the batteries of the neighboring heights, but also from those of Taiyangkou, Mantoushan, Golden Hill, and Paiyushan. The Japanese reported that this bombardment inflicted no material loss on their army. During the attack the Russians exploded a large mine in the glacis of the Erhlungshan Fort, but the effect of the explosion was unimportant.

The Japanese continued their bombardment during the night and the Russians made several small sorties from Sungshushan and Erhlungshan forts.

The bombardment of the Japanese on the 27th destroyed or severely injured 1 gun carriage, 3 large guns, and 2 machine guns in the Erhlungshan and Tungchikuanshan forts. On the 28th it caused the explosion of a magazine in North Tungchikuanshan and injured 2 guns in East Tungchikuanshan Fort, and 2 in Itzushan. Fires were also started in Port Arthur.

During the night of the 28th the Japanese sappers and miners resumed their work against the counterscarp gallery in the eastern corner of North Tungchikuanshan Fort, against which they had exploded a mine the preceding night, and exploded two more mines, making a large breach and killing a dozen of the Russians who were occupying the gallery. They also exploded a mine at the head of their approach to Erhlungshan Fort and destroyed a portion of the counterscarp.

On October 29 a party of about 100 Russians made a sortie before daylight against the approach to Erhlungshan Fort. At the same time a similar party made a sortie against the tunneled passage to Sungshushan Fort and after a desperate struggle drove the Japanese out. About 2 p. m. the latter attacked and recovered the passage.

On this day the naval guns were directed against Hsítaiyangkou, Antzushan, Itzushan, Paiyushan, and Sungshushan forts, blowing up the magazine at Hsítaiyangkou. They also fired on five mine-removing boats in West Harbor, causing fires to break out on two of them.

On October 30 the Japanese began a heavy bombardment in the early morning and at 1 p. m. began a general attack, which was particularly directed against the Sungshushan, Erhlungshan, and North Tungchikuanshan forts. Troops from the First and Ninth Divisions succeeded by sunset in occupying the glacis of the Sungshushan and North Tungchikuanshan forts and in destroying a number of side defenses.

A portion of the Ninth Division carried P. Fort (between Panlungshan and North Tungchikuanshan forts) at 2 p. m. and began to entrench. The Russians made a determined attack against these troops and drove them out about 10.30 p. m. The Japanese, personally led by Major-General Ichinohe, Sixth Brigade, Ninth Division, again attacked and recaptured the fort about 11 p. m., taking 3 guns, 2 machine

guns, and other spoils. The Japanese renamed the fort Ichinohe.

Troops from the Eleventh Division attacked the north and east forts of Tungchikuanshan and the adjacent fieldworks, but were repulsed after having partly carried Kobuyama (an intrenched height north of East Tungchikuanshan Fort) and the trench on the glacis of the east fort.

On the 31st the Eleventh Division again charged North Tungchikuanshan Fort, but was repulsed.

On the night of the 31st the Russians made a small sortie against the extreme right of the Japanese line.

During the day the fire of the Japanese heavy and naval guns injured the *Gilyak*, sank two steamers in the harbor, and started a conflagration near the wharf. On November 1 it sank two steamers, and on the 2d one.

On the 3d it started a conflagration near East Harbor, which lasted until the next morning, injured the guns in the gorge of North Tungchikuanshan Fort, and damaged the fieldwork at H., northwest of Wangtai.

On the 6th it caused the explosion of a magazine at the Old Sungshushan Fort.

The month of November was by the Japanese devoted mostly to sapping and mining operations and bombardment of the Russian vessels in the harbor. The Russians resisted the sapping and mining operations by occasional sorties of small parties. The approaching exhaustion of their artillery ammunition caused a falling off in the action of this arm and left the Japanese artillery greater freedom of action.

On November 17 the Japanese destroyed the counterscarp galleries of Sungshushan Fort, and completed the occupation of its counterscarp on the next day. On the 19th a powder magazine near the arsenal was exploded by a Japanese shell. The Russians made a determined but unsuccessful sortie from Erhlungshan Fort. The Seventh Division, landed at Dalny the preceding day, began to arrive.

On November 20 the Japanese exploded three mines, blowing in the counterscarp and partly filling the ditch of Erhlungshan Fort.

On November 21 the Japanese attempted an assault on North Tungchikuanshan Fort, which failed. A counter attack of the garrison was repulsed.

On November 23 troops of the Eleventh Division captured the trench on the northern glacis of East Tungchikuanshan Fort, but were driven out early in the morning of the 24th.

On the afternoon of November 26 the Japanese began a general attack on the Sungshushan, Erhlungshan, and Tungchikuanshan forts. The storming parties were driven back, but the assault was continued.

On the night of November 26 a force of about 2,500 men, drawn from all four divisions and commanded by Major-General Nakamura, made an unsuccessful assault on the works running southwest from Sungshushan Fort (Sungshushan supporting fort). The attack was disclosed by the Russian searchlights and subjected to a heavy fire, which, however, did but little damage. This attack ceased about 2.30 a. m. on the 27th, after severe hand to hand fighting, and cost the Japanese nearly one-half of the attacking force.

The general attack, which was very desperate on the 26th and 27th, continued on a lesser scale until December 2, when a partial armistice was entered into on the eastern front for the recovery of the killed and wounded.

The loss suffered by the Japanese has been estimated as high as 12,000 killed and wounded. Lieutenant-General Tsuchiya, commanding Eleventh Division, Major-General Saito, commanding the Fourteenth Brigade, Seventh Division, and Major-General Nakamura were among the wounded.

On November 28 troops of the First Division and the First Kobi Brigade began an attack on 203 Meter Hill and Akasakayama. Both sides resorted to hand grenades, in the use of which the Japanese were at a disadvantage, on account of the higher elevation of their opponents. In addition, the assault was subjected to fire from Sungshushan and failed at Akasakayama. A small party reached the crest of the southwest peak of 203 Meter Hill, was driven a short distance below the crest, and then succeeded in holding on until an approach could be constructed through which they could be reenforced.

On November 30 the Japanese brought forward their wooden guns and began bombarding the summit. The force holding the advance on the southwest peak was reenforced by one company and advanced to near the crest where a high

wall of sand bags was constructed. The First Regiment attacked and finally occupied the Russian trenches on the slope of Akasakayama, but evacuated them shortly afterwards on account of being fired on by their own artillery.

Troops from the Twenty-sixth, Twenty-seventh, and Twenty-eighth Regiments assaulted the northeast peak of 203 Meter Hill, carried the Russian trenches on the slope, and endeavored to reach the crest, but were driven back to the trenches.

On December 1 troops of the Seventh Division again assaulted 203 Meter Hill, one party passing over the crest of the southwest peak and clearing a portion of the summit, and were again repulsed. The Japanese holding the trenches on the slope of the northeast peak were also driven out.

During December 2, 3, and 4 the Japanese restricted their action to bombarding the Russian positions and to constructing an approach up the northeast peak of 203 Meter Hill. On the morning of the 5th the fire of the Japanese artillery was increased. About 3 p. m. eight battalions of the Seventh Division, under Major-General Saito, advanced against the northeast peak and, in conjunction with the reinforced troops holding the crest of the southwest peak, carried all of 203 Meter Hill.

The capture of 203 Meter Hill allowed the Japanese to bring on Akasakayama a plunging fire which, accompanied by demonstrations, caused the Russians to evacuate that height on December 6 and to withdraw from the trench leading toward Itzushan. It also gave an observation point covering both harbors and enabled the fire of the heavy siege and naval guns to be directed upon the Russian war ships in the harbor. On December 9 the *Sevastopol* anchored outside the harbor under shelter of Tiger's Tail Peninsula, but was subsequently torpedoed by the Japanese and sunk in deep water by her own commander. The other large vessels by that time had been crippled by the Japanese fire and scuttled by the Russians to protect them as much as possible from the Japanese fire.

On December 18, at 2.30 p. m., the Japanese exploded mines under the parapet of North Tungchikuanshan Fort. The Twenty-second Regiment then charged the fort, but halted in the crater. About 7.30 p. m. two companies of

the Thirty-eighth Kobi Regiment entered through the breach, and by midnight the fort was completely occupied, the Japanese capturing five 87-mm. field guns, two 74-mm. quick-fire guns, two 24-mm. guns and 4 machine guns.^a

On December 22, 23, and 24 the Japanese attacked and carried some small Russian positions near the northern arm of Pigeon Bay and thus advanced their right so that it ran from 203 Meter Hill through Luchiatun to Pigeon Bay.

On December 28, at 10 a. m., the Japanese exploded mines under the parapet of Erhlungshan Fort and an assaulting force from the Ninth Division reached the crater and intrenched. At 4 p. m. the Nineteenth and Thirty-sixth Regiments resumed the assault and reached the interior of the fort. The remainder of the garrison was finally driven back from the defense of the gorge, and at 7.30 p. m. the Japanese had possession of the entire fort with its armament of 4 heavy guns, 7 guns of smaller caliber, thirty 37-mm. guns and 2 machine guns. The fighting during the capture of the fort was severe, the Japanese losing about 1,000 killed and wounded.

On December 31 the Japanese exploded mines under the parapet of Sungshushan Fort, the explosion extending to the magazine. Troops from the First and Seventh Divisions then assaulted and drove out the remnants of the garrison, capturing with the fort and its armament 2 officers and 160 men who had been imprisoned in the galleries by the explosion.

On January 1, 1905, in the early morning, the Japanese drove the Russians from the new Panlungshan Fort and H. work. At 3 p. m. a small force of Japanese reached the summit of Wangtai, but was driven back by the Russians, who then set fire to the wooden structures of the work and withdrew. The Japanese again occupied the summit, losing some of their men through the explosion of the magazine or a Russian mine.

At 9 p. m. General Nogi received from General Stoessel a letter proposing to hold negotiations with reference to capitulation.

^a It was in this fort that General Kondratchenko and 8 other officers were killed by a bursting shell on December 15.

Both belligerents appointed plenipotentiaries, who completed their negotiations at 4.30 p. m. on January 2, and both armies suspended hostilities.

By the terms of the capitulation all Russian soldiers, marines, and civil officials of the garrison and harbor were made prisoners; all forts, batteries, vessels, munitions, etc., were transferred to the Japanese in the condition in which they existed at noon on January 3, and all public property, such as buildings, munitions of war, etc., were to be left in position, pending arrangement for their transfer. Officers of the army and navy were permitted to retain their side arms, and, upon signing a parole not to take arms during the continuance of the war, return to Russia. Noncommissioned officers and privates were to be held as prisoners.

The organizations taking part in the defense of Port Arthur are shown in the following tables of prisoners transferred:

LAND FORCES.

| Organization. | Officers. | Men. |
|--|-----------|--------|
| <i>January 5, 1905.</i> | | |
| 5th East Siberian Rifle Regiment..... | 36 | 1,547 |
| 13th East Siberian Rifle Regiment..... | 38 | 665 |
| 14th East Siberian Rifle Regiment..... | 32 | 882 |
| 15th East Siberian Rifle Regiment..... | 50 | 1,353 |
| 16th East Siberian Rifle Regiment..... | 30 | 1,004 |
| | 186 | 5,451 |
| <i>January 6, 1905.</i> | | |
| 25th East Siberian Rifle Regiment..... | 42 | 1,432 |
| 26th East Siberian Rifle Regiment..... | 40 | 1,420 |
| 27th East Siberian Rifle Regiment..... | 58 | 2,178 |
| 28th East Siberian Rifle Regiment..... | 52 | 1,505 |
| 7th Reserve Battalion..... | 14 | 282 |
| 3d Reserve Battalion..... | 12 | 308 |
| 10th Regiment Staff..... | 2 | 66 |
| 11th and 12th East Siberian Regiments..... | 4 | 195 |
| 4th Artillery Brigade..... | 26 | 901 |
| Garrison artillery..... | 2 | 113 |
| Kuantung garrison artillery..... | 68 | 2,783 |
| Gendarmes..... | 2 | 24 |
| | 322 | 11,207 |
| <i>January 7, 1905.</i> | | |
| Staff of General Stoessel..... | 9 | 39 |
| Staff of Kuantung commander-in-chief..... | 6 | 15 |
| Engineer Company..... | 11 | 269 |
| Telegraph Corps..... | 4 | 60 |
| Railway Corps..... | 1 | 155 |
| Cavalry..... | 4 | 177 |
| Field, post, and telegraph offices..... | 33 | 23 |
| | 68 | 738 |
| Total land forces..... | 576 | 17,396 |

NAVAL FORCES.

| Organization. | Officers. | Men. |
|--|-----------|--------|
| Crew of— | | |
| Retvizan..... | 22 | 446 |
| Pobieda..... | 22 | 510 |
| Pallada..... | 11 | 208 |
| Peresviet..... | 15 | 807 |
| Poltava..... | 16 | 311 |
| Sevastopol..... | 31 | 507 |
| Bayan..... | 15 | 259 |
| Bober..... | 12 | 99 |
| Strodeval..... | 4 | 52 |
| Otvazhni..... | 6 | 124 |
| Gilyak..... | 5 | 72 |
| Amur..... | 7 | 173 |
| Naval defense headquarters..... | 3 | 3 |
| Harbor office..... | 60 | 29 |
| Naval brigade..... | 59 | 2,531 |
| Torpedo brigade..... | 10 | 142 |
| Total naval forces..... | 298 | 6,073 |
| Land forces..... | 576 | 17,396 |
| Total transferred to include Jan. 7..... | 874 | 23,469 |

In addition to the above there were about 3,000 noncombatants transferred and about 16,000 sick in hospital. The total number of prisoners, including sick, wounded, and prisoners was given at 41,641.

Russian figures, not official, place the original garrison (including naval contingent) at 54,000; killed and died during the siege, 15,000; taken prisoners, 21,000, in addition to 18,000 sick, of whom 6,000 were wounded.

The composition of the Third Japanese Army, when completed, was as follows:

| Organization. | Commander. | Chief of staff. | Brigade. | Commander. | Regiment. |
|--|--------------------------|-----------------------------|--------------------------|----------------------------------|----------------------------|
| 1st Division..... | { Fushimi, Matsumura. | Yoshino..... | { 2d..... 1st..... | Nakamura..... Yamamoto, Baba. | 2d, 3d. 1st, 15th. |
| 7th Division..... | Oseko..... | Ishigomo..... | { 13th..... 14th..... | Yoshido..... Saito..... | 25th, 26th. 27th, 28th. |
| 9th Division..... | Oshima II..... | Adachi..... | { 6th..... 18th..... | Ichinohe..... Mayeta, Hirasa. | 7th, 35th. 10th, 36th. |
| 11th Division..... | { Tsuchiya, Samejima. | { Ishida..... Saito..... | 22d..... 10th..... | Kamio..... Yamanaka..... | 43d, 12th. 44th, 22d. |
| 1st Kobi Brigade..... | | | | Takinuchi, Oki. | 1st, 15th, 18th. |
| 4th Kobi Brigade..... | | | | Tomogasu, Yakanachi. | 8th, 9th, 38th. |
| Artillery Brigade (72 guns). | | | | Nagata..... | |
| Naval Brigade (1,200 men). | | | | Kuroi..... | |
| Fortress Artillery (3 regiments, 1 battalion, 2 groups). | | | | Teshima..... | |

The First Regiment contained 6 field batteries; the Seventh, 2 field and 2 mountain batteries; the Ninth, 6 mountain batteries; the Eleventh, 6 mountain batteries; the Second Artillery Brigade, 12 field batteries.

The total artillery used by the Japanese during the siege is estimated at—

| | |
|-----------------------------|------------|
| 6-inch naval..... | 4 |
| 4.7-inch naval..... | 10 |
| 12-pounder naval..... | 20 |
| 10.5 cm. Krupp..... | 4 |
| Bronze guns (Russian)..... | 30 |
| 8.7 cm. (Russian)..... | 6 |
| Field guns..... | 120 |
| Mountain guns..... | 84 |
| Total guns..... | 278 |
| 28-cm. howitzers..... | 18 |
| 15-cm. howitzers..... | 16 |
| 12-cm. howitzers..... | 28 |
| Total howitzers..... | 62 |
| Mortars, about..... | 160 |

The total effective strength at the time of the capitulation may be taken as about 75,000.

The Seventeenth Regiment, Eighth Division, was present at the capture of 203 Meter Hill.

Unofficial reports state that the Eighth (Osaka) Kobi Regiment, as punishment for misconduct on August 23, was withdrawn from the fighting contingent for work on the lines of communication.

General Nogi reported a list of spoils in which the following important items are found: 59 permanent forts and fortifications; 546 guns; 82,670 projectiles; 35,252 rifles; 2,266,800 rifle cartridges; 4 battle ships (not including the *Sevastopol*, which the Russians had sunk in deep water) comprising the *Peresviet*, *Poltava*, *Pobieda*, and *Retvizan*; 2 cruisers, comprising the *Bayan* and *Pallada*; 14 gunboats and destroyers; 10 steamers; 8 steam launches. All the vessels were sunk and in a more or less damaged condition. The battle ships, cruisers, and some of the smaller vessels were, however, subsequently floated by the Japanese.

LANDING OF THE FOURTH JAPANESE ARMY.

On May 19 Rear-Admiral Hosoya, with the *Fuso*, *Heiyen*, *Tsukushi*, *Saiyen*, and other vessels, convoyed transports containing troops of the Fourth Japanese Army to Takushan, and the debarkation began immediately, being unopposed.

At first this army consisted of the Tenth Division under Lieutenant-General Kawamura, with Major-Generals Marui and Tojo as brigade commanders. Subsequently the Fifth Division was joined to the Tenth, forming the Fourth Army, commanded by General Nodzu.

Following two unimportant skirmishes, communication with the First Army was established shortly after landing, and the combined force began working to the west and northwest.

On June 8 a combined detachment from the two armies occupied Siuyen after a skirmish at Tahuling with Major-General Mishchenko's Cossack brigade, which retired toward Tomucheng. On June 18 a reconnoitering detachment sent from Siuyen encountered a Russian detachment in the neighborhood of Chipanling. On June 23 there was a skirmish at Hsienchiayu, on the road to Tashihchiao, and again on the heights north of Santaoho.

FENSHUILING.

(Plate VI.)

On June 26 the Takushan force advanced against the Russians at Fenshuiling in three columns under Colonel Kamada and Major-Generals Asada and Marui. Asada, with his brigade from the Guards Division, proceeded from Yang-pankou toward Fenshuiling; Kamada, from Tasangpoyu against the Russian right; Marui, from Tsiehkuan-yin by a circuitous route against the Russian right rear. A force under Major-General Tojo was charged with protecting the rear of that under Marui. To do this, Tojo attacked the Russians who were occupying Shanghota and Tungchia-chuang with about 3 battalions, a battery of horse artillery, and 2 machine guns.

The fight lasted all day without advantage to either party, but during the night Tojo again attacked and carried the position, which he occupied and in which he was several

times attacked on the afternoon of the 27th by the Russian force, which had received reinforcements.

General Marui reached Tsiehkuanyin on the night of the 26th, sent a detachment to attack the flank and rear of the Russians who were opposing Tojo, and with his main body advanced at 3 a. m. on the 27th to turn the Russian rear at Fenshuiling. This main body was opposed by two battalions at Erhtaokou, but drove them back about 11 a. m. and reached Santaokou.

Major-General Asada, after driving back a force of Russian infantry and cavalry near Wanchiapu on the 26th, passed the night to the south of Wafantien at the eastern foot of Fenshuiling. At 5 a. m. Asada's artillery began firing on the Russian fortifications, but the Russian artillery, well posted and skillfully handled, maintained the advantage. However, Kamada's force dislodged two companies of Russian infantry from halfway up the Tihungshan.

Asada then posted his guns at this latter place about 7 a. m. and opened fire on the Russian right. Kamada with his infantry then left Tihungshan, moving against the Russian flank and rear.

In the meantime the Fukaya regiment, detached by Asada, attacked at midnight of the 26th and drove two companies of Russian infantry from the heights west of Yangpankou at 7 a. m., and then moved toward the Russian left rear.

This brought the Japanese on three sides of the Russians, who began to withdraw toward Tomucheng about 8 a. m., and Asada's infantry moved forward and occupied the pass at 11.30 a. m.

Besides the pass itself the Japanese captured 88 prisoners, including 6 officers. They lost 75 in killed and wounded, including 1 officer, Major Oba, killed. The Russians lost about 200 men.

The capture of Fenshuiling gave to the Takushan army an entrance to the Liao Valley and placed it in a position to quickly cooperate with General Oku, moving up from the south on Kaiping, should such cooperation prove necessary. Such cooperation would, however, expose its right wing to the Russian force now assembled at Haicheng and Liaoyang, but for the operations of the Japanese First Army by which it gained possession of the Fenshui Mountains north of Fenshuiling.

ADVANCE OF THE JAPANESE FIRST ARMY FROM FENG-HUANGCHENG.

In the advance from Fenghuangcheng the Japanese First Army marched in three columns, the Twelfth Division moving on the Saimachi-Liaoyang road, the Second Division on the Lienshankuan-Liaoyang road, the Guards Division to the left of the Second Division and maintaining communication with the Takushan army.

The Second Division, leaving Fenghuangcheng on June 24, reached Hsuliten the same day, Hanchiatai on the 25th, and Washosho on the 26th, remaining at the latter place until the 30th for the purpose of arranging an attack on the fortified position at Bunsuling. The Russians, however, on June 27, evacuated Bunsuling and Lienshankuan, and on the 30th the Second Division continued to and occupied Lienshankuan, the advance guard occupying Motienling without resistance. In this position roads were built, supplies brought up, and telegraph lines built connecting the different portions of the First Army.

Moving north on the Saimachi road, the Twelfth Division had a skirmish on the 27th of June with some infantry and cavalry coming from Saimachi. The Russian force at Saimachi retired toward Pensihu and was followed by the Twelfth Division, which thus turned the Russian position at Bunsuling, while the Second Division was approaching it from the south. A detachment of the Twelfth Division moved to the left as far as the Lienshankuan-Liaoyang road, entering Lienshankuan and Motienling on June 29. The line of communications of the Twelfth Division was now Saimachi-Aiyangpienmen-Chongsung-Yalu.

The Third Division, East Siberian Rifles, occupying Lienshankuan, had at Domonshi an outpost of 2,000 men and 6 guns, which withdrew on June 24.

On July 4, in the early morning and in a dense fog, two Russian battalions, one from the Tenth East Siberian Rifles and one from the Twenty-fourth, attacked the Japanese battalion of the Thirtieth Regiment at Motienling, driving the advance picket off the road by a flank attack and penetrating the Japanese line. The attack was vigorously pushed, the opposing troops engaging in a hand to hand combat. Japanese reinforcements arrived, however, and the Russians were forced to retire toward Yangtzuling with

a loss of 53 killed and about 40 wounded. The Japanese lost 19 men killed and 2 officers and 36 men wounded.

On July 5 some Cossacks attacked a Japanese detachment near North Fenshuiling on the road from Saimachi to Liaoyang, but failed to dislodge it and retreated northward after the skirmish.

On July 6 a detachment of Japanese dislodged a body of Cossacks from Hsienchang and occupied the town.^a

With the occupation of Kaiping by Oku, on July 9, the three Japanese armies were united on a front from Kaiping east to Fenshuiling, thence northeast through Motienling, with covering detachments of Kobi troops eastward at Saimachi, Hsienchang, and Huaijen.

The Russians were concentrated in the Liao Valley at Tashihchiao, Haicheng, Anping, and Liaoyang.

On July 6 Field Marshal Oyama left Tokyo to take active command of the Japanese Manchurian army. With him were General Kodama, Chief of Staff, and Major-Generals Fukushima and Inokuchi.

On July 9 the Takushan army sent a column toward Tangchi via the roads leading through Hsienchiayu and Tsiehkuanyn, the two detachments reaching the heights south of these places at 9 and 11 a. m., respectively. The Russians at Hsienchiayu resisted the attack throughout the day; those at Tsiehkuanyn, about two battalions and a battery, retired from their position in the evening. On the morning of the 10th the Japanese drove the Russians from their position west of Hsienchiayu and continued to and occupied the second Russian position on the heights of Hsinchaikou.

On the 10th another force from the Takushan army, advancing from Fenshuiling toward Tomucheng, came into conflict with the Russians and was repulsed, reporting the Russian force south of Tomucheng to consist of about one division.

^aThese Cossack detachments belonged to the division of Lieutenant-General Rennenkampf, who was on the extreme left flank operating on the upper waters of the Taitzu River. Of the completed division the First Brigade, commanded by Major-General Grekov, was composed of the Second Verkhne-Udinsk and Second Chita Regiments, the Second Brigade, commanded by Major-General Liubavin, was composed of the Second Nerchinsk and Second Argunsk Regiments.

SECOND ATTACK ON MOTIENLING.

(Plate VII.)

On July 17 Lieutenant-General Keller, with six regiments of infantry from the Third and Sixth Siberian Divisions and the ninth European Division, a battery of artillery and a small force of cavalry, attacked Motienling and vicinity held by the Second Japanese Division.

In the Japanese forces the Sixteenth Regiment (less one battalion) was at and near Hsiamatang, the Thirtieth Regiment at and near Motienling, the Fourth Regiment at and near Hsinkailing, the remainder of the division in reserve near Lienshankuan.

At 3 a. m. the Japanese advance post in front of Motienling was attacked and driven back. By 5 a. m. the Russian line had reached the ridge west of Motienling and was engaged with the Thirtieth Regiment and one battery in position on the ridge east of Motienling. The Russians reenforced their first line and continued the fight, making several attempts to turn the Japanese left. These attempts were met by sending some detachments to prolong the Japanese left. About 9 a. m. three companies from the Sixteenth Regiment from Hsiamatang reenforced the right of the Thirtieth Regiment and shortly afterwards the Russians in front of Motienling began withdrawing. The Japanese at Motienling, now reenforced by one battalion of the Twenty-ninth Regiment and the greater portion of the Second Cavalry Regiment, followed a short distance, but coming under the fire of a Russian battery from near Lichiaputzu ceased the pursuit about 2 p. m.

About 1 a. m. the outpost of the Japanese Fourth Regiment at Hsinkailing was attacked by two Russian battalions, one coming from the west and one from the north. The Japanese Fourth Regiment repulsed this attack and sent northward a detachment which at 1 p. m. was able to bring a long-range fire on the Russians retiring from Motienling.

The Japanese Sixteenth Regiment at Hsiamatang had outpost companies on the roads leading from that village to the west, the northwest, and the north. About 8 a. m. the company on the road leading to the west was attacked. Three companies of the Sixteenth Regiment, en route to assist the Thirtieth Regiment, joined this outpost company,

assisted in repulsing the Russians, and continued on to the assistance of the Thirtieth Regiment.

The outpost company on the road leading northwest from Hsiamatang, at Shakahoshi, was attacked about 8 a. m. by two Russian battalions and very severely handled, losing all its officers. The fighting continued at this point until about 4.50 p. m., the Japanese company being reenforced by the outpost company from the road leading west and also from the reserve of the Sixteenth Regiment, which had been strengthened by one battalion of the Twenty-ninth Regiment, when the Russians retired.

The company on the road leading north to Hsihoyen was attacked about 11.30 a. m. by a Russian detachment of infantry and cavalry and driven back to near Hsiamatang where it was reenforced by one company of pioneers that had arrived from near Lienshankuan. The Russians withdrew from this attack about 12.30 p. m.

The Japanese reported their losses as 4 officers and 39 men killed; 15 officers and 241 men wounded.

The Russians reported a loss for July 17 to 19 of 8 officers and 215 men killed, 37 officers and 1,069 men wounded, and 2 officers and 224 men missing.

HSIHOYEN.

(Plate VIII.)

General Kuroki's right column (Twelfth Division) moved forward on the Saimachi-Hsihoyen-Anping road on July 18, sending an infantry detachment toward Hsiaotientzu (about 5 miles south of Chinghochen), which was occupied by the Russians.

On arriving at Santaohotzu the column found that Hsihoyen was occupied by the Russians, commanded by General Herschmann, and sent forward a battalion of the Forty-sixth Regiment to reconnoiter. This battalion encountered at the river a force of about 2 battalions and 8 guns and was forced back a short distance after losing heavily.

About 6.30 p. m. the Japanese battalion was reenforced by the other two battalions of the Forty-sixth Regiment and two battalions of the Twenty-fourth Regiment and continued the fight until dark, and then, being unable to make any headway, bivouacked in position.

The Russian left rested on the Hsi River, while the right rested on the heights, to the southwest of Hsihoyen, rising from 50 to 300 feet above the valley.

From the main body of the Japanese column at midnight on the 18th was sent the Forty-seventh Regiment to watch the road to Pensihu, and the Fourteenth Regiment through the hills to the south against the right of the Russian position. The artillery took up a position in the valley and opened fire at 5 a. m. on the 19th. To this fire the Russians replied with 32 guns. The duel, lasting until 9 a. m., seems to have resulted in favor of the Russians, as no further attempts were made in front until the Fourteenth Regiment made its way through the mountains and, in conjunction with a detachment of 6 companies of the Sixteenth Regiment, Second Division, sent from the neighborhood of Lienshan-kuan, attacked the Russian right about 3 p. m. The Russians withdrew their artillery and presumably a considerable portion of their infantry.

The main Japanese force, Twenty-fourth and Forty-sixth Regiments, which was in position fronting the Russian right, took up the attack, assisted by the fire of its artillery from advanced positions. Both attacks met stubborn resistance. At 5.40 p. m. the main force carried one of the heights to the southwest of Hsihoyen and the attack of the two detachments approached close to the Hsihoyen-Anping road. The Russian rear guard retired and the Japanese occupied the position about 8 p. m.

The Russian force was reported by the Japanese to consist of the Thirty-fifth Infantry (4 battalions), Thirty-sixth Infantry (3 battalions), the Argunsk Regiment of Cossacks, and 32 guns.

The Japanese reported a loss of 2 officers and 70 men killed and 16 officers and 437 men wounded; also, that they buried 131 Russian dead on July 20, took 2 officers and 45 men prisoners, and captured 3 ammunition wagons, 300 rifles and a large quantity of clothing.

The Russian loss is included in that reported under the second attack on Motienling.

The detachment sent toward Hsiaotientzu encountered a battalion of infantry and about 1,000 cavalry at Chaochiapao,

5 miles south of Hsiaotientzu. After a skirmish of about four hours the Russians retired to the right bank of the Taitzu with a loss of 1 killed and 13 wounded. The Japanese lost 17 men wounded.

PANLING PASS.

On July 21 a Russian detachment, reconnoitering to the south, came into contact with a detachment of the Takushan army in the neighborhood of Panling Pass, and occupied the pass after a skirmish, in which they lost a captain killed and Lieutenant-Colonel Andreiev, commanding the detachment, and 3 soldiers wounded. The Japanese had 2 men killed. About noon on the next day the detachment was attacked from different directions and driven from the pass, which the Japanese occupied. The Japanese lost 1 officer and 8 men killed and 22 men wounded. The Russians lost 14 men killed, 3 captured, and about 30 wounded.

TASHIHCHIAO.

(Plate IX.)

On July 23 General Oku's army left its line of positions near Kaiping and advanced to the line Liuchiakou-Huarushan-Wutaishan, skirmishing with Russian detachments during the advance, particularly in front of the Japanese left. The Fifth Division was on the right, the Third in the center, the Fourth on the left, and the Sixth in reserve. Cavalry from both armies was to the west of the railway.

The Russian "southern forces," commanded by Lieutenant-General Zarubaiev, contained the First, Second, and Fourth Siberian Corps and Major-General Mishchenko's Cossack brigade; a total of about 88 battalions, 32 squadrons, and 172 guns. The First and Fourth Siberian Corps occupied a position south of Tashihchiao, reaching from the railway, near Niuhsinshan, to the small stream flowing south past Tangchi. The Second Siberian Corps, at this time containing only the Fifth Division, was at Tomucheng. The Cossack brigade maintained connection between the two positions.

At dawn of the 24th the Fifth Division attacked in the direction of Taipinling. The Russian artillery, skillfully

placed and handled, maintained a superiority over that of the Japanese.

The Third Division, adied by the fire of its artillery near Huarushan, advanced as far as the heights north of Sun-chiatun at 10 a. m., where it was stopped by the Russian artillery posted between Chingshihshan and Wangmatai. The Fourth Division then advanced from Wutaishan, its artillery taking a position near Tapinchuang and engaging in a duel with the Russian artillery near Wangmatai, but soon halted.

Orders were then sent for the Fifth Division to advance regardless of losses, but at sunset it had not succeeded in penetrating the Russian line. The Third Division succeeded in capturing one position, but was in turn driven back by a counter attack.

The artillery fire practically ceased on both sides at sunset, although the Russian artillery fired occasional shots as late as 9 p. m.

The commander of the Fifth Division obtained permission to make a night attack, and about 10 p. m. advanced the greater part of his infantry to near Taipinling and then captured the Erhtaoling position. A second advance was made by the same body, occupying the Taipinling position about 3 a. m. The Third Division moved forward and occupied the heights near Shanhsitao shortly afterwards.

On the morning of the 25th the artillery of the Third Division near Wolungkang opened fire, but received no reply. The infantry from that position then moved forward and occupied Chingshihshan and was followed by the Fourth Division, which moved forward and occupied the line from Niuhsinshan to Chiataipu.

About 11 a. m. the Russian rear guard left Tashihchiao, which was occupied by the Japanese shortly afterwards.

The First Siberian Corps retired along the railway toward Haicheng. The Fourth Siberian Corps retired along the Erhtaoho road and aided the Second Siberian Corps at Tomucheng on July 31.

Lieutenant-General Zarubaiev reported that he had 18 battalions engaged and lost 4 officers and 141 men killed, 30 officers and 646 men wounded, and 3 officers and 107 men missing.

General Oku reported that the Japanese lost 12 officers and 136 men killed, and 47 officers and 848 men wounded.

During the 25th a detachment of Japanese cavalry proceeded to and occupied Yingkou, the Russian garrison having retired to the northeast.

TOMUCHENG.

(Plate IX.)

On July 30 the Takushan army occupied a line from the height west of Tafangshan through that north of Hsiapafankou to south of Kuchiaputzu and southwest of Yinglaoshan.

At dawn on the 31st the main body attacked the Russian position on the heights east of Sanchiaoshan, and the left wing attacked the positions on the heights north of East and West Yangshikou.

By 8 a. m. the Japanese left wing had reached the heights northwest of West Yangshikou, where it was repulsed by the Russians at Erhtaokou. The Japanese left, reinforced by the arrival of the Fifth Division, which was detached from the second army after the battle of Tashihchiaio, resumed the attack and drove back the Russians from Erhtaokou about 3 p. m., capturing 6 guns.

The main column was able to occupy the Russian positions on the heights west of Tapingling at 10.30 a. m., but was compelled to halt there by the fire of the Russian artillery at Changsankou and on the heights east of Hsiaofangshan. The Russians being reinforced, took the offensive on this part of the field about 5 p. m., and drove the Japanese from the positions they had occupied on the heights west of Tapingling.

This counter attack had been ordered by General Zasulich to relieve the pressure on his extreme right, of which he was informed about 3.40 p. m.

During the night the Russians retired toward Haicheng, having lost, as reported by Zasulich, on the 30th and 31st, 29 officers and a little over 1,000 men killed and wounded. The Japanese reported a loss of 8 officers and 186 men killed, 24 officers and 642 men wounded, and the capture of 6 guns and 570 rounds of gun ammunition, 63 rifles, and various other articles.

YUSHULINGTZU.

(Plate VIII.)

On the night of July 30 the two wings of the Japanese First Army moved forward against the Russian East Detachment. The Twelfth Division moved in two columns from the neighborhood Hsihoyen-Peichai, leaving the Kobi Brigade, commanded by Major-General Umezawa, in the Laomuling region to watch the Pensihu district. A detachment from the Second Division, and consisting of the Thirtieth Infantry and one battalion of the Sixteenth, moved from Hsiamatang toward Yushulingtzu in cooperation with the Twelfth Division.

At dawn on the 31st the right column (Kigoshi's brigade) attacked the advanced Russian position, which was about 2,000 yards in advance of the main position on the heights of Lakouling, and carried the same about 8.50 a. m. It then advanced against the main position.

In the meantime the left column (Sasaki's brigade) came into conflict with a force of Russian infantry at Pienling about 6.35 a. m. and the Hsiamatang detachment attacked a Russian battalion at Niaomeiling and drove it back about 8 a. m. In the pursuit of this force the Hsiamatang detachment flanked the Russian force at Pienling and succeeded in obtaining a position from which it opened a galling fire, at distances from 200 to 1,000 yards, upon this force during its withdrawal, inflicting severe loss.

In the afternoon the right column attacked the main Russian position at Lakouling, but was repulsed.

At dawn on August 1 the Russians withdrew from the vicinity and the Twelfth Division advanced to Lakouling.

YANGTZULING.

(Plate VII.)

In the left wing of the Japanese First Army the Second Division, less the Hsiamatang detachment, operated on the Motienling-Anping road. The Guards Division was to the left of the Second, the two divisions moving in conjunction against the Russian position at Yangtzuling.

In the early morning of July 31 a detachment of the Second Division drove in the Russian outpost on the heights east of Tawan and the infantry took up positions for the attack on the heights west of the Lang River. Two batteries took up a position near Chinchiaputzu, but the remainder of the artillery did not succeed in taking up positions until about 11 a. m.

The Guards attacked from the direction of Makumentzu at dawn, sending detachments by various passes to turn the Russian right. In addition to the opposing infantry the attack came under the fire of four Russian batteries posted on the summit of Yangtzuling and neighboring heights. The Japanese artillery was unable to reply effectively and the attack made no progress during the forenoon. The flanking detachments reached the heights west of Hanchiaputzu.

At 10.15 a. m. one battery of the Second Division opened fire but was soon silenced.

Shortly after 2 p. m. the artillery of the Second Division opened fire on Tawan and the heights to its north and some infantry moved forward. A general artillery duel then ensued in which the Russian artillery, posted on the heights north and south of Yangtzuling, had the advantage.

Shortly after 4 p. m. infantry of both divisions attacked near Tawan and Makumentzu. On the right the attack passed beyond Tawan, otherwise but little progress was made. The attack ceased at sunset, the Russians withdrew during the night, and on the morning of August 1 the Japanese moved forward and occupied the Yangtzuling position.

The Russian force at Yushulingtzu comprised the Thirty-first and Thirty-fifth Divisions (later incorporated in the Tenth and Seventeenth Corps, respectively), one brigade of the Ninth Division (later incorporated in the Tenth Corps), and four batteries of artillery. The force at Yangtzuling comprised the Third and Sixth East Siberian Rifle Divisions (Third Siberian Corps), one brigade of the Ninth Division, and four batteries of artillery.

General Kuroki reported his loss in the two engagements as about 900 killed and wounded and the capture of 2 field guns, 500 or 600 rifles, a quantity of ammunition and minor articles, and 8 officers and 149 men.

The Russians reported a loss of 10 officers and 349 men killed, 42 officers and 1,192 men wounded, and 2 officers and 219 men missing.

The Russian commander, Lieutenant-General Keller, was killed at Yangtzuling.

The front of the combined Japanese armies on August 1 was Tashihchiao-Tomucheng-Yangtzuling-Yushulingtzu.

OCCUPATION OF HAICHENG.

(Plate IX.)

On August 1 the Japanese Second Army moved forward along the railway from its positions near Tashihchiao, being opposed by some small rear guards.

The Russian artillery from northeast of Hulukou and from Hiachiaho opened fire on the heads of the Japanese columns at Liangchiaputzu and Nanchinshan, while a horse battery, supported by cavalry, opened fire from Hungwasai. Some Japanese artillery replied from near Tungchiakou and Wenchiakou and a column west of the railway, driving back the opposing infantry and cavalry, advanced and occupied Liuchiaputzu and Lienshantun. The Russian rear guard then withdrew.

On August 2 the Japanese advanced, without serious opposition, to the Pali River, and the Russians withdrew from Haicheng toward Anshantien. On the next day the Japanese occupied Haicheng.

With the conclusion of this advance the front of the Russian forces at and in the vicinity of Liaoyang extended from Anshantien through Lantzushan and the mountain range east of Anping to the Taitzu River.

The Japanese front extended from Haicheng through Tomucheng and Yangtzuling to Yushulingtzu.

On August 6 a Russian force bombarded and burned the village of Kenchuangtzu, driving back troops of the Japanese First Cavalry Brigade and its infantry supports and capturing some of the pack animals and some of the ovens in which food was being prepared. The Russians followed the Japanese to about 3 miles southeast of Kenchuangtzu and then withdrew.

OPERATIONS IN THE VICINITY OF LIAOYANG.

(Plate X.)

At the time of the Japanese advance on Liaoyang the Russian forces in that vicinity were organized and stationed as follows:

| | Battal- ions. | Guns. | Sotnias. |
|--|------------------|------------|-------------|
| I. The southern group, Lieutenant-General Zarubaiev, at Anshantien: | | | |
| a. 1st Siberian Corps..... | 21 | 88 | 20 |
| b. 2nd Siberian Corps (5th Division)..... | 12 | 32 | 11 |
| c. 4th Siberian Corps..... | 24 | 32 | 11 |
| d. Mounted Detachment..... | | 6 | 18 |
| Total..... | 57 | 158 | 60 |
| II. The eastern group, General Bilderling, containing: | | | |
| a. In the position near Lantzushan the 3rd Siberian Corps..... | 24 | 68 | 17 |
| b. In the mountain range east of Anping the 10th Corps..... | 20 | 88 | 18 |
| c. On the right bank of the Taitzu under Major-General Yanzhul..... | 8 | 44 | a 6 |
| d. Reserve at and near Liaoyang..... | 19 | 64 | a 6 |
| Total..... | 71 | 264 | a 47 |
| III. Army reserve: | | | |
| a. In Liaoyang..... | 30 | 48 | 22 |
| In intrenched camp..... | 6 | 64 | 3½ |
| b. In and near Mukden— 5th Siberian Corps..... | 27 | 48 | |
| Mukden garrison..... | 3 | | |
| Total..... | 66 | 160 | 25½ |
| IV. Flank detachments: | | | |
| a. Penshu..... | 5 | 4 | 6½ |
| b. Weiningying..... | | 4 | 12 |
| c. Near Chinghochon..... | 2 | 2 | 12 |
| d. At Tawan (on Liao River)..... | 3 | 4 | 8 |
| Total..... | 10 | 14 | 38½ |
| V. Lines of communications..... | 19½ | | |
| Army total..... | 223½ | 596 | 171 |

a Squadrons.

Of these the Russians report 128 battalions taking part in the battle, 49 battalions in reserve, 10 battalions guarding the flanks, 12 battalions in rear; joined during the battle, 16 battalions and 24 guns, belonging to the First European and First and Fifth Siberian Corps, making the total effective strength available for battle about 165,000.

RUSSIAN UNITS AND COMMANDERS.

| Corps. | Commander. | Division. | Commander. |
|-------------------|------------------|-------------------------------------|---------------|
| 1st Siberian..... | Stackelberg..... | 1st East Siberian Rifle..... | Gerngross. |
| | | 9th East Siberian Rifle..... | Kondratovich. |
| 2d Siberian..... | Zasulich..... | 5th East Siberian Rifle..... | Alexiev. |
| | | 2d Brigade, 17th Infantry Division. | |
| 3d Siberian..... | Ivanov..... | 3d East Siberian Rifle..... | Kashtalinaki. |
| | | 6th East Siberian Rifle..... | Danilov. |
| 4th Siberian..... | Zarubalev..... | 2d Infantry..... | Revestan. |
| | | 3d Infantry..... | Kotsuvich. |
| 5th Siberian..... | Dembovski..... | 54th Infantry..... | Orlov. |
| | | 71st Infantry..... | Eck. |
| 10th Army..... | Sluchevski..... | 9th Infantry..... | Herschelmann. |
| | | 31st Infantry..... | Mau. |
| 17th Army..... | Bilderling..... | 3d Infantry..... | Volkov. |
| | | 35th Infantry..... | Dobrzinski. |

JAPANESE UNITS AND COMMANDERS.

| Army. | Commander. | Division. | Commander. |
|----------|-------------|----------------------------|------------|
| 1st..... | Kuroki..... | Guards..... | Hasagawa. |
| | | 2d..... | Nishi. |
| | | 12th..... | Inouye. |
| | | Kobi Brigade..... | Umezawa. |
| | | 3d..... | Oshima. |
| | | 4th..... | Ogawa. |
| 2d..... | Oku..... | 6th..... | Okubo. |
| | | 1st Cavalry Brigade..... | Akiyama. |
| | | 1st Artillery Brigade..... | Uchiyama. |
| | | Two Kobi Brigades..... | |
| 4th..... | Nodzu..... | 5th..... | Ueda. |
| | | 10th..... | Kawamura. |
| | | One Kobi Brigade..... | |

During the latter portion of the battle the artillery brigade was attached to the Fourth Army.

The total effectives taking part in the battle was about 140,000.

In moving on Anping the Japanese First Army operated in three columns against the Russian eastern group. The Guards moved by the main Fenghuangcheng-Erhtaoho road against the Lantzushan position; the Twelfth Division moved on the Saimachi-Hsihoyen-Anping road; the Second Division, in the center, operated via Tienshuitien and Santaoing against the Russian position through Tsuekou and Height 2070.

As the Japanese concentration against Tsuekou became apparent the Second Brigade of the Russian Thirty-first Infantry Division crossed from the right bank of the Taitzu River and the forces defending Anping were rearranged as follows: The "right fighting section," under General Herschelmann, had in the first line between Height 2070 and Miao-

ling 16 battalions, 54 guns, 8 sotnias, and 2 mounted detachments; in rear of the right of this line was a reserve of about 10 battalions, with artillery, under Major-General Rabinkin; in rear of the left was a reserve of about 5 battalions, with artillery, under Major-General Prince Orbeliani; south of Anping were two batteries, with a battalion escort, arranged to fire on the Tsuekou position should it be carried by the Japanese.

Colonel Klembovski, with the One hundred and twenty-second (Tambov) Regiment, the Seventh Battery of the Thirty-first Artillery Brigade, and 2 sotnias, held the position on Height 1911 (Hungshaling).

The general reserve, under Major-General Vasiliev, was in two groups; one, of 4 battalions, at Anping, and the other, of 8 battalions and 50 guns, at Shunshuyantzu.

The Guards advanced on August 23, being opposed only by small patrols, and on the 24th occupied a line passing through Erhtaoho, the Second Brigade (Watanabe) on the right, the First Brigade (Asada) on the left; the Second and Twelfth Divisions moved forward on the afternoon of the 25th. At about 5.45 a. m. on the 25th the Guards artillery, from the height north of Takou, opened fire with one battery on the Russian line near Kofuintzu, and the infantry drove back the Russian outposts to the line Tahsintun-Tahsikou.

To meet the concentration of the Japanese infantry near Takou the Russian line was prolonged from the height west of Kofuintzu through that north of Hsiaohsikou to near Pao-shukou. This echelon, containing $7\frac{1}{2}$ battalions, $13\frac{1}{2}$ sotnias, and 20 guns, was placed under the command of Major-General Kashtalinski. To further strengthen the threatened right flank of the Lantzushan position two regiments of the Thirty-fifth Division, Seventeenth Corps, and 3 batteries were concentrated at Hsiaoling during the night of the 25th; the One hundred and fortieth (Zaraisk) Regiment, same corps, 1 battery and 6 squadrons left Tsaofangtun at midnight, moving via Weichiakou on Kofuintzu. General Bilderling also shifted 2 regiments from the right to the left bank of the Taitzu, stationing the main body at the bridge at Hsiaotuntzu, and sending 3 battalions to Kinchiatunhsikou.

During the night of August 25 the Japanese Twelfth Division, Twenty-third Brigade (Kigoshi) on the right, the

Twelfth Brigade (Sasaki) on the left, moved forward and attacked Hungshaling and Chipanling. The attack of the left column, made in conjunction with the Second Division, drove back the Russians occupying the line from near Tsuekou to Miaoling to the line Tsuekou-Sanchiatzu, but the Russian force at Hungshaling successfully resisted the attack.

During this attack the Second Division also moved forward, the Fifteenth Brigade (Okasaki) on the right, the Third Brigade (Matsunaga) on the left, and attacked the Russian line, in advance of Tsuekou, running from Chipanling to Height 2070, and carried the greater part of the same by dawn. The Russian reserve, under Major-General Vasiliev, already en route to make a strong demonstration beyond Tsuekou, reenforced this part of the line, and severe fighting continued until about noon of August 26. The Russians occupied the line from Height 2070 to Yuchiakou and about 1.30 p. m. their artillery near Anping opened fire, thus assisting the troops that were being driven back from the position between Tsuekou and Sanchiatzu.

At 1.30 a. m. on August 26 Lieutenant-General Ivanov sent from Hsiaoling the 2 regiments of the Thirty-fifth Division, 2 batteries and 1 squadron to take up a position on the height north of Kofuintzu.

At 5.35 a. m. the Guards artillery, increased to 60 guns from the artillery of the Second Division, on a line from Ertahou to the height north of Takou, opened fire on the Russian positions, especially on the heights west of Kofuintzu. The infantry of Asada's brigade which had driven in the Russian outposts, by noon had advanced to a line along the stream from Hsiaohsikou to the foot of the height south of Paoshukou, practically outflanking the Russian right. The Zaraisk Regiment, en route from Sanshantzu to Changchiaopu, on reaching a point about midway between these towns, learned of the situation. Its commander moved to Paoshukou and attacked down the valley. The Japanese line was driven out of the valley and by 2 p. m. the Zaraisk Regiment had occupied the bluffs just north of Tahsikou, where it remained controlling with its fire the valley about Tahsikou. During the forenoon the Twenty-ninth Kobi Regiment, then in the reserve of the Japanese First Army, was ordered to march to the assistance of the Guards Division.

At 6 a. m., August 26, the attack of the right column of the Japanese Twelfth Division had reached Hungshaling (called the Peikou position by the Russians), one mountain battery firing for a short time from the height about 1 mile northeast of Hiei-yu. Unsuccessful at first, the attack was repeated in the afternoon with increased severity, and by 6 p. m. the Tambov Regiment and two battalions sent to its assistance were compelled to withdraw with the loss of the 8 guns of the Thirty-first Artillery Brigade.

General Kuropatkin ordered that Peikou be retaken at any cost, but before the execution of this order was begun he ordered withdrawal from the Lantzushan-Anping positions, the second order reaching General Bilderling about midnight.

The Russians withdrew their main forces, leaving rear guards to delay the Japanese advance. By evening of the 27th the Japanese occupied a line from Hungshaling along the heights close to the right bank of the Tang River to Kofuintzu and then through the heights north of 'Tahsikou. The Russians remaining in the triangle formed by the Taitzu and Tang rivers retired across the latter over a military bridge, near Shuangmiaotzu, which they then destroyed, floating the pontoons down to the Taitzu River.

General Kuroki reported the capture of 8 guns, a quantity of ammunition, and various articles; also that his losses on the 26th and 27th were about 2,000.

General Kuropatkin reported that the battle was a serious one, and General Sakharov reported that the Russians had lost over 1,500; the greater portion of their losses occurred in the Tenth Corps.

On August 27 the Japanese Fourth and Second Armies reached a line extending from Shangshihchiaotzu to west of Sumatai, skirmishing with some Russian detachments during the advance, and prepared to attack the Anshantien position, held by the First, Second, and Fourth Siberian Corps. As a result of the progress of the fighting near Anping the Russians at Anshantien did not offer serious resistance. In their withdrawal the Russians were followed closely by the Japanese columns, which by 10 a. m. on the 28th had advanced to a line through Tiaochuntai-Tashitou-Taokuantun and were able to bring an artillery fire upon some Russian columns crossing the Sha River.

During the withdrawal 1 battery, 8 guns, of the First Siberian Corps, mired so badly that it was found impossible to remove it, even when using all available horses assisted by soldiers with ropes, and was abandoned to the Japanese.

On August 28 in the Japanese First Army the action of the Twelfth Division was confined to artillery fire with the opposing Russians on the right bank of the Taitzu and left bank of the Tang. The Second Division attacked and displaced the Russian rear guard from the heights north and west of Sanchiasai, Matsunaga's brigade continuing to Height 1701. The Guards advanced and, after some severe fighting, especially north of Wantsikou, occupied the line of heights through Ssufangtai-Sanshantzu.

On August 29 the Twelfth Division began preparations to cross to the right bank of the Taitzu; the Second Division occupied Shihtsuitzu and Tashihmenling; the Guards advanced to the heights south of Hsuchiakou and reconnoitered toward Yayuchi. In the Japanese Fourth Army the Tenth Division effected a junction with the left of the Guards Division near Weichiakou, drove the Russians from that locality, and advanced toward Mengchiafang; the Fifth Division occupied a line from Laichiapu to Heiniuchuang. The Japanese Second Army occupied the line of the Sha River with its right advanced to Heiniuchuang.

To meet the advance of the Japanese armies General Kuropatkin, on August 29, issued an order under which the various organizations under his command were to occupy the prepared positions and oppose a determined resistance to the further advance of the Japanese. The details of the occupation of positions were under corps commanders.

As a result of said order in the First Siberian Corps (General Stackelberg), 9 battalions and 24 guns, under Major General Gerngross, held the line from Kuchiatzu to the Hsiaoyangtzu-Shoushanpu road; 6 battalions and 24 guns, under Major-General Kondratovich, extended the line from that road to the Hsiaoyangtzu-Hsinlitun road; the Thirty-third Regiment was on the height of Fangchiatun; 9 battalions, under Major-General Zikov, were held as reserve at the village of Shoushanpu; 2 batteries were near Chuangchiatun, facing west; 2 were west of the Mandarin road, north of the spur cut by that road from the ridge north of

Hsiaoyangtzu; 2 were in rear of the first dip and 2 in rear of the second dip east of the Mandarin road; 2 were in the saddle of the Fangchiatun-Nanpalichuang road; Colonel Gurko, with 8 squadrons and sotnias, was at Nanpalichuang.

In the Third Siberian Corps (Lieutenant-General Ivanov), 6 battalions and 16 guns, under Major-General Danilov, held the heights west and south of Tsaofangtun as far east as the Tsaofangtun-Weichiakou road, the artillery being on the north slope in rear of depressions, and 1 battalion holding an isolated peak in front of the main line; 9 battalions, under Major-General Stolitzki, extended this line to across the Suichangyu-Mengchiafang road. Thirty-two guns were placed on the northern slope of the line of low hills north of Tsaofangtun, a position that gave a good field of fire on the low ground between the First and Third Siberian Corps; 32 guns were placed on the northwestern slope of the spur that terminates at Suichangyu. The general reserve, 19 battalions and the 2 mountain batteries, under Major-General Kashatalinski, was at Tsaofangtun. The 6 sotnias, also, were at Tsaofangtun, ready to reconnoiter the gap between the First and Third Siberian Corps.

In the Tenth Corps (Lieutenant-General Sluchevski) 8 battalions under Major-General Herschelmann, held the line from the left of the Third Siberian Corps to the Kaolingtzu-Wangpaotai road; Major-General Vasiliev, with 8 battalions, held the line from that road to Hsiaopu.

The 12 mortars were in the saddle over which the Kaolingtzu-Yayuchi road passes; 32 guns were at Kaolingtzu; 32 were at Hsiaopu and on the line between that village and Yayuchi; 8 battalions and 24 guns were in reserve at Kaolingtzu; 8 battalions were in reserve at Suichangyu.

In the army reserve Lieutenant-General Zasulich (Second Siberian Corps), with 16 battalions, 32 guns, 2 sotnias, and 1 sapper battalion, was between Hsituchiaotzu and Tungpalichuang, 4 of his battalions occupying a fortified position near Pachiakangtzu; Lieutenant-General Zarubaiev (Fourth Siberian Corps), with 22 battalions, 32 guns, 6 sotnias, and 1 sapper battalion, was near Talingtzu; Major-General Samsonov, with 19 sotnias and 6 guns, was at Changchialintzu, within the line of forts; Major-General Maslov, commander

of the intrenched camp of Liaoyang, had 9 battalions, 32 guns, and 2 sotnias.

On the right flank Major-General Mishchenko, with 16 guns and 21 sotnias, was moving south on Wuluntai, with instructions to connect with the detachment of 1 battalion, 12 guns, and 14 sotnias under Major-General Vladimir Grekov at Hsiaopeiho.

The left flank was guarded by 18½ battalions, 74 guns, 13½ squadrons and sotnias under General Bilderling. Of these forces, 2½ battalions and 8 guns were in position at Hsikuantun; 4 battalions and 24 guns near Hsiaowagotzu; 8 battalions and 36 guns were in position from the heights at Sanwantzu to that at Tsofankou; 12 squadrons and sotnias were at Hsikuantun and Chuankufen; the Fifty-second Dragoon Regiment was reconnotiering the right bank of the Taitzu River above Kuantun.

Major-General Orlov, with 8 battalions, 16 guns, and 1 sotnia, was near Shahopu.

In the Japanese army at this time the orders were for the left of the First Army and the entire Fourth Army to attack the Russian line from the Wangpaotai-Kaolingtzu road to Heiniuchuang, and for the Second Army to attack the Shou-shanpu position. To comply with this order General Oku issued the following order:

1. The enemy is still holding his position on the heights of Shoushanpu and Hsinlitun. Our cavalry brigade has advanced to the vicinity of Wangerhtun.

2. The army will advance on the 30th against the line Shoushanpu-Fangchiatun, with a view to attacking the enemy.

3. The Third Division will leave the line of the Sha River at 5 a. m., August 30, will move east of the railway on the front Tataitzu-Heiniuchuang, and advance against the southern and southeastern heights of Shou-shanpu. One regiment of the artillery brigade is attached to the Third Division.

4. The Sixth Division will leave the line of the Sha River at 5 a. m. in conjunction with the Third Division, marching between the railway and the road through Tayaotun, Tachuntzu, Likaipu, and Liuchiasanchiatzu.

5. The Fourth Division will leave the line of the Sha River at 6 a. m. and, marching by the western road, will assemble at Hsinglungtai.

6. The artillery brigade (less one regiment) is under the commander of the Sixth Division and will march closely behind the same. In case of being compelled by bad roads, it may march on the Mandarin road.

7. The foot artillery (34 guns and mortars) will march at 5 a. m. via the Mandarin road.

8. The infantry reserves (two Kobi brigades) will march at 5 a. m., following the railway, and assemble at Shaho village.

9. The commanding general will start along the railway at 5 a. m. and will be found at Shaho village.

In compliance with the above order the commander of the Third Division issued the following order:

1. The enemy is still holding his positions south of Shoushanpu and Hsin-litun. The advance guard of our cavalry brigade is expected to reach the vicinity of Wangerhtun to-day. The army is to advance to-day to the line Shoushanpu-Fangchiatun, with a view to attacking the enemy. The Sixth Division is to leave the line of the Sha River at 5 a. m. and is expected to reach the line Liuchiasanchiatzu-Kuchiatzu, advancing on the roads west of the Mandarin road and to include the road through the villages of Tayao-tun, Tachuntzu, and Likaipu.

2. The Third Division will advance against the southern and eastern hills of Shoushanpu.

3. The Thirty-fourth Infantry Regiment, a section of cavalry, the Third Artillery Regiment (less one battalion), and one section of the Third Engineer Battalion will form the advance guard of the Seventeenth Brigade and will march on the southern hill of Shoushanpu via the Mandarin road.

4. The Sixth Infantry Regiment, one battalion of the Third Artillery Regiment, and one section of the Third Engineer Battalion will form the advance guard of the Sixth Brigade, will leave the line of the Sha River at 5.20 a. m. and march on the hill north of Hsiaoyangtzu via Yangchiaochuang and Heiniuchuang.

5. The troops forming the main body of the left column will start at 6 a. m., following the advance guard closely in the following order:

(a) Squadron of cavalry (less two sections); (b) division headquarters; (c) Eighteenth Infantry Regiment; (d) headquarters and one company of the Engineer Battalion; (e) Thirteenth Artillery Regiment; (f) Thirty-third Infantry Regiment; (g) Ambulance Corps.

6. The division commander will be at the head of the main body of the left column.

About 5 a. m. on August 30 a small detachment from the Guards attacked the Russian line near Mengchiafang. The attack was followed by an exchange of artillery fire that continued for about four hours. The Guards again opened a heavy artillery fire about 10 a. m. on the Mengchiafang-Yayuchi positions and moved the infantry forward to about 1,000 yards from the Russian line.

About 5.30 a. m. a battalion from the Tenth Division and Kobi brigade attacked the hill held by the Russians as an advance post in front of the Third Siberian Corps. A few minutes later a Japanese battery opened from near Kuchiatzu, and the attack with increasing force was twice repeated

and the hill carried about 6 a. m. From the reserve of the Third Siberian Corps two battalions were sent to reenforce its right, which was now subjected to a very severe infantry fire from the line through the hill just carried by the Japanese. The Japanese artillery from south of Mengchiafang, near Weichiakou and Shihchiyotzu, also opened fire on this portion of the Russian line, and the infantry began advancing down the valley from Shihchiyotzu toward Wichiakou.

At 7 a. m. General Kuropatkin ordered Lieutenant-General Zasulich to send 3 battalions to the reserve of the Third Siberian Corps. Six battalions of the Tenth Corps also were sent to the reserve of the Third Siberian Corps, but a little later 4 of these battalions were returned to the Tenth Corps.

The attack down the valley toward Wichiakou was opposed not only by the right of the Third Siberian Corps, but also by the force under Major-General Putilov near Pachiakangtzu, now consisting of $7\frac{1}{2}$ battalions, 55 guns, and 6 sot-nias. This attack was followed by several others against different portions of the front occupied by the Third Siberian Corps. About 1 p. m. these attacks ceased for a time, the artillery fire continuing. The fighting had been severe and the losses on both sides heavy. The only material advantage on either side was the capture by the Japanese of the hill held as an advance post in front of the right of the Third Siberian Corps.

About 3.30 p. m. the Japanese again attacked, advancing against the western Yayuchi heights on both sides of the Tsaofangtun-Weichiakou road and on Pachiakangtzu. Some of the trenches occupied by the Eleventh Rifle Regiment on the left of the Third Siberian Corps were captured about 4.30 p. m. The Eleventh Regiment, assisted by a regiment from the reserve and the fire of the Russian artillery, assumed the offensive and drove the attacking party back to Hsuchiakou. The attack of the right brigade of the Guards on the western height of Yayuchi was partly successful, but was halted by the arrival of 4 battalions sent from the reserve of the Tenth Corps to strengthen its right. About 7 p. m. the Japanese Third Brigade made an attack on the height east of the Kaolingtzu-Wangpaotai road, which lasted until 10 p. m.; causing 3 battalions to be sent from the reserve of the Tenth Corps to that portion of its front.

During the afternoon attack on the Tsaofangtun heights and Pachiakangtzu 2 battalions of Russians from the latter position assumed the offensive, advancing as far as Wichiakou.

On August 30, also, the Japanese Fifth Division, moving in conjunction with their Second Army, attacked the Shou-shanpu position. Contact with the Russians was first gained by troops of the Fifth Division in the vicinity of Tawan at dawn. About 6 a. m. the Japanese artillery opened fire from a line running generally from Heiniuchuang through Height 224 to Taputzu. The infantry of the Third Division, on reaching the line through Heiniuchuang and Tataitzu, was extended into the hills east of Heiniuchuang, joining the Fifth Division and occupying Hsiaoyangtzu about 10.45 a. m.

By 11 a. m. the Japanese Sixth Division had reached a line through Tachaochiatai and opened fire against the Russian trenches at Mayetun and Kuchiatzu. At about the same time General Kuropatkin received a report from Major-General Mishchenko saying he had found the villages of Wuluntai, Binmatun, and Baichialaoguawo occupied by small detachments of Japanese. General Kuropatkin ordered that 2 battalions from the Fourth Siberian Corps and 8 sotnias from the Ural regiments be sent to General Mishchenko. Three battalions from the Second Siberian Corps were sent to the First Siberian Corps, and the Twelfth Siberian (Barnaul) Regiment and 12 guns from the Fourth Siberian Corps were ordered to march to the line of the railway north of Kuchiatzu. A little later the Seventh (Krasnozhar) Regiment and 12 guns from the Fourth Siberian Corps were placed at the disposal of General Stackelberg and ordered to Hsipalichuang.

About 2 p. m. the battery with the Japanese cavalry reached a position near Wangerhtun that permitted a fire upon the rear of the Russian position at Shoushanpu.

In the meantime one Kobi regiment was sent to reenforce the right of the Third Division, which, with the left of the Fifth Division, was operating against the height northeast of Hsiaoyangtzu, causing the 8 battalions and 2 batteries of the Second Siberian Corps to be sent from Tungpalichuang

to Hsipalichuang, while 2 batteries were placed at the disposal of General Stackelberg and sent to Fangchiatun.

The Twelfth Siberian (Barnaul) Regiment reached Yuchiachantzu at 5.30 p. m. The accompanying 12 guns took up a position along the railway and opened fire on Chuchiaputzu, Baichialaoguawo, and Hsiaochingtsuitzu. Assisted by the Seventh (Krasnozharsk) Regiment, the Barnaul Regiment occupied Chuchiaputzu and stopped the advance parties of the left of the Japanese Sixth Division and of a column of 4 battalions from the Fourth Division which had prolonged the Japanese left. The rifle fire continued in the neighborhood of Chuchiaputzu until midnight, when the Russians in that vicinity appear to have retired to the railroad.

At nightfall Major-General Mishchenko retired to Tanchuangtzu.

At 4.25 p. m. General Oku was informed that the Russians had taken the offensive from the Tsaofangtun position, and was directed to drive the Russians from the Shoushanpu position as quickly as possible. Accordingly, night attacks on that position were contemplated. The attack to the west of Shoushanpu was deferred because of the Russian offensive on that part of the field. The attack of the Third Division began to develop toward morning of August 31. During the night the Japanese Tenth Division made a demonstration against the right flank of the Tsaofangtun position and small parties occupied Wichiakou, Minchialantzu, and Tassu.

During the night of the 30th and on the 31st of August the Japanese Twelfth Division and the Fifteenth Brigade, Second Division, forded the Taitzu River in the neighborhood of Lientaowan and, with but little opposition, by 6 p. m. had occupied the heights extending from west of Kuantun to near Tsakou, the Twelfth Division on the right. At Goyo was constructed a pontoon bridge, by which artillery crossed during the night of the 31st.

Information of the crossing reached the commander of the Fifty-second Dragoon Regiment at 6.20 a. m. and General Kuropatkin at 11 a. m., the delay being said to have resulted from a break in the wires leading from the Seventeenth Corps to headquarters. In compliance with an order sent from General Kuropatkin's headquarters at 11.30 a. m.,

Lieutenant-General Dobrzhinski, with 8½ battalions of the Seventeenth Corps, occupied a position on the eastern slopes of Height 917, through Hsikuantun and Manjuyama, placing 16 guns near Hsikuantun and 32 east of Sahutun.

To guard the left of this position Major-General Orbeliani, with 2½ battalions, 6 guns, and 16 sotnias, was sent to Yang-chiaputzu. The Fifty-second Dragoon Regiment had retired before the Twelfth Division to Choheyentai.

In the meantime the Guards Kobi Brigade crossed the Taitzu River, surprised the sotnia at Weiningying, and advanced to Pensihu. General Liubavin, who had 6 sotnias and 4 guns at Pensihu, 1 sotnia at Weiningying, and 2 sotnias at Sanchiatzu, withdrew to Hsiaoshihchiaotzu, where he was joined the next day by the Two hundred and thirteenth Orovaisk Regiment and 1 battery.

At 3.20 a. m. August 31 the Japanese attempted to break through along the Mengchiasfang-Suichangyu road and at 5.30 a. m. made an attack against the right of the Tsaofangtung position that continued until about 8 a. m. From that time on the Third Siberian Corps was not subjected to any severe attack on the 31st, although several times subjected to a severe artillery fire and several lesser attacks in the afternoon. During the afternoon the Russians from the Pachiakangtzu position drove the Japanese out of Minchialantzu and Tassu.

In front of the Russian Tenth Corps all was quiet except a reconnaissance by a Russian regiment, which advanced as far as Chututai and was then ordered to return.

About 3 a. m. the Japanese began an attack on the positions of the First Siberian Corps that continued throughout the day with practically no interruptions. The right of the Third Division, in conjunction with the Fifth Division, attacked the height northeast of Hsiaoyangtzu. The Sixth Division renewed the attack on Mayetun, being assisted by the fire of a large number of guns. The Fourth Division was advancing through Chuchiaputzu, Hsiangohotzu, and Chougohotzu with an advance company as far as Yuchia-chantzu. The First Cavalry Brigade was in the vicinity of Wangerhtun with a detachment at Shuitsuiyan.

In the early morning Major-General Mishchenko moved from Tanchuangtzu toward Wuluntai, his 2 battalions of the Tenth Siberian Regiment driving the Japanese out of

Shuitsuiyan. The 2 Russian batteries at Chuangchiatun were directed to fire against the Japanese to the west, and 7 battalions of the First Siberian Corps reserve were moved to Shoushanpu, leaving but 2 battalions in reserve at Fangchiatun.

By noon the attack against the Shoushanpu position was general and very severe. Shortly after noon the Japanese captured some of the advance trenches near the Hsinlitun-Hsiaoyangtzu road and reached the crest of the elevation. Here they were subjected to artillery fire from east of Fangchiatun in addition to the fire of the infantry they were attacking, and were driven back about 1.45 p. m. to the lower trenches.

About noon the Twelfth Siberian (Barnaul) Regiment and 1 battalion from the reserve drove the Japanese company out of Yuchiachantzu.

The First Siberian Corps was hard pressed throughout the day, being under a continuous fire of infantry and artillery, the fire of the latter being particularly severe from about 5 p. m. until after 7 p. m. and coming from all the Japanese artillery within range.

On receipt at 11 a. m. of the report of the Japanese crossing the Taitzu River, General Kuropatkin decided to withdraw to the main Liaoyang position and to concentrate the troops thus rendered available against the Japanese on the right bank. This decision was communicated to corps commanders about noon, with instructions to defer the withdrawal until after nightfall. The withdrawal was rendered less difficult than it would otherwise have been by the fact that on both the 30th and 31st the trains were being sent to the right bank of the Taitzu River, while the railroad had been actively employed in the removal of stores and the evacuation of the wounded.

In the withdrawal the Eighty-fifth and Two hundred and Eighty-second Regiments, with 8 guns, under Major-General Eck, were to lead, going to Ertaokou (near Hsikuantun).

The Tenth Corps was to go to Sinchung, sending 2 battalions and 16 guns to occupy the position on the right bank of the Taitzu River near Muchang, and 8 battalions and 24 guns to the Liaoyang garrison.

The Third Siberian Corps, timing its withdrawal with that of the First Siberian Corps, so as to protect the left flank of the latter, was to concentrate along the north wall of Liaoyang, detaching 6 battalions and 16 guns to the Liaoyang garrison.

The Second and Fourth Siberian Corps were to join the Liaoyang garrison, to be commanded by Lieutenant-General Zarubaiev, thus raising the garrison to 64 battalions, 102 field guns, 22 heavy guns, 24 mortars, 10 sotnias, and 2½ battalions of sappers.

The First Siberian Corps and the force under Major-General Mishchenko were to withdraw entire to the right bank of the Taitzu River.

The Seventh (Krasnozhar) Siberian Regiment, with 2 additional battalions, was to hold its position near Yuchiachantzu, covering the withdrawal of the First Siberian Corps and protecting the railroad station.

At 6 p. m. Major-General Samsonov was ordered to at once proceed to and occupy the Yentai mines, to reconnoiter southeast of the same and protect the left flank of the Seventeenth Corps. A little later Major-General Orlov, with his 12 battalions, 16 guns, and 3 sotnias, was ordered to proceed at daybreak on September 1 from Yentai Station to Hsiaotailienkou, there to reconnoiter and attack the right flank of the Japanese, and to fall back toward the Yentai mines should he find the Japanese in superior strength.

The Russian withdrawal was carried out as ordered. The First Siberian Corps began its withdrawal at 9 p. m. and concluded about 3 a. m. on the morning of September 1, at which time the First Siberian Regiment withdrew under rifle fire from near Mayetun. The Third Siberian and Tenth Corps, leaving as rear guards the detachments that were to be sent to the Liaoyang garrison, withdrew without being molested. The Shoushanpu position was occupied by the Japanese by dawn of September 1, and the Tsaofangtun position was occupied during the forenoon of the same day. The Japanese Second and Fourth Armies were then fronting the main line of defense south and west of Liaoyang.

This line consisted of strongly constructed field works, from 800 to 1,800 yards apart, connected by a network of shelter trenches, gun emplacements being in general back

of and opposite the center of the interval between field works. The line began at a point about three-fourths of a mile southeast of Ufa, ran west to the railway, turned sharply north and ran through Hsinerhchung to Fort No. 8 on the right bank of the Taitzu River. A second defensive line ran from the northwest corner of the city wall to the river.

Including the railway bridge and the one constructed at Ufa, 8 bridges crossed the Taitzu River within the main defensive line.

On the morning of September 1 the Russian forces were distributed as follows:

I. Seventeenth Corps: (a) Major-General Yanzhul, 8 battalions, 40 guns, and 2 squadrons, was holding the line from Sanwantzu to Tsofankou; (b) Lieutenant-General Dobrzinski, 16½ battalions, 96 guns, and 4½ squadrons and sotnias, was holding a line from the spur southwest of Hsikuantun through that village to include Manjuyama; (c) Major-General Eck, with his unattached brigade of 7 battalions, 8 guns, and 2 sotnias stationed at Tutaokou and Chouchingtzu, acted as reserve to the corps; (d) Major-General Orbeliani, 2 battalions, 6 guns, and 12 squadrons, was at Choheiyentai with instructions to reconnoiter to the east and toward the Yentai mines, and to protect the left flank of the corps.

II. Tenth Corps: (a) Main body, 22 battalions, 58 field and 7 mountain guns, 12 mortars, and 4 sotnias, was at Fenshan, Shangwagotzu, and Shichotzu; (b) 8 battalions and 24 guns were in the Liaoyang garrison; (c) 2 battalions and 16 guns held a portion of the Muchang position.

III. First Siberian Corps: (a) The First Division was at Liutsuichuang; (b) the Ninth Division was at Yingtsuishi; (c) Colonel Gurko, with his 9 squadrons and sotnias, was at Kaolichiang. The corps was much reduced in numbers. The Thirty-third Regiment was merged with the Thirty-fifth Regiment, bringing the strength of the latter up to 5 companies of 10 officers and 1,020 men. Eight fresh battalions joined the corps about this time.

IV. Third Siberian Corps: (a) 18 battalions, 48 guns, and 4 sotnias were at Chaochialing; (b) 6 battalions and 16 guns were with the Liaoyang garrison.

V. General Mishchenko, with 21 sotnias and 12 guns, was at Siaichiatun.

VI. Major-General Orlov, with 12 battalions, 20 guns, and 2 sotnias, was on the branch railway near Hsiaotalienkou.

VII. Major-General Samsonov, with 6 guns and 19 sotnias, was at the Yentai mines.

VIII. Major-General Liubavin had 4 battalions, 12 guns, and 12 sotnias at Hsiaoshihchiaotzu and Shangpingtaitzu.

IX. Major-General Vladimir Grekov, with 1½ battalions, 12 guns, and 4 sotnias, was on the right bank of the Taitzu between Liaoyang and Hsiaopeiho, his right connecting with Major-General Kossagovski's detachment at Tawan on the Liao River.

X. Lieutenant-General Zarubaiev, with 58 battalions, 118 guns, 24 mortars, 10 sotnias, and 2½ battalions of sappers, was in the Liaoyang defenses on the left bank of the Taitzu River.

Major-General Kondratovich, with 6 battalions, 8 guns, and 2 sotnias of the Liaoyang garrison, was on the right bank of the Taitzu River near Fort No. 8, with orders to assist Major-General Grekov in guarding the Taitzu below Liaoyang.

While the Liaoyang garrison and troops assigned to protect the flanks of the same were to hold back any direct advance of the Japanese Second and Fourth Armies the remainder of the Russian forces under immediate command of General Kuropatkin were to carry out the following plan:

The Seventeenth Corps was to hold the Hsikuantun position as a pivot; the Tenth Corps, First Siberian Corps, and the troops under Major-General Mishchenko were to advance on the front Sahutun-Hsiaotalienkou; Major-General Orlov was to move on Chuankufen, coordinating his movements with those of the First Siberian Corps; Major-General Samsonov was to move on the extreme left flank, reconnoitering toward Pensihu; 2 regiments of the First Corps were to move from Mukden to Shahopu to take the position vacated by Major-General Orlov. The Third Siberian Corps was to act as reserve of this force.

The organizations taking part in this attack were to assemble on the 1st, the concentration was to take place on the 2d, and the attack was to be made on the 3d of September. The troops taking part were to aggregate 95 battalions, 60 sotnias and squadrons, and 342 guns, making a force of about 67,000 bayonets and 5,000 sabers.

On September 1 the Japanese Fifteenth Brigade, assisted by the Twelfth Division on its right, began advancing against Manjuyama. At 6.30 a. m. the Japanese artillery opened fire from the ridge east of Chuankufen and the Russian advance posts retired from the ridge west of Chuankufen, which was occupied by the Japanese about 8 a. m. The exchange of artillery fire continued with but little interruption throughout the day; the Japanese firing from near Kuantun and Tsakou, the Russians firing from near Hsikuantun, Yangchiatun, and Choheiyentai.

In the Russian position the Tenth (Novoingermanland) Regiment occupied Hsikuantun and the slopes southwest and northeast of the same; the One hundred and thirty-seventh (Niezhin) Regiment occupied Manjuyama; the One hundred and fortieth (Zaraisk) Regiment was on the left of the Niezhin Regiment, the One hundred and thirty-ninth (Morshansk) and One hundred and thirty-eighth (Bolkhov) Regiments were in reserve.

About 7 p. m. the Japanese artillery increased its fire, and about 8 p. m. the Fifteenth Brigade, the Thirtieth Regiment on the right and the Sixteenth on the left, assaulted Manjuyama in front and on both flanks. The companies of the Novoingermanland Regiment that were in Hsikuantun and on the slope to the northeast gave way and retreated to Sahutun, thus exposing the right flank of the Niezhin Regiment. The left of the latter regiment also gave way, but was brought back with the aid of two companies of the Bolkhov Regiment. The artillery with the Novoingermanland Regiment retired to Tutaokou.

After a struggle of about one hour, the assault was repulsed and the Japanese artillery again began firing on Manjuyama. This was followed by a second assault, which again reached the crest but was driven back a short distance with the aid of 2 battalions of the Morshansk Regiment on the right of the Niezhin Regiment. The assault persisted and the Japanese finally occupied the crest about midnight, the opposing Russians falling back to the line from Height 917 through Sahutun to Choheiyentai.

The Japanese Third Brigade, Second Division, began to arrive toward night of September 1, and 3 companies of

the Twenty-ninth Regiment assisted in the capture of Manjuyama.

The Japanese Twelfth Division appears to have been placed on the defensive during September 1 by the Zarsk Regiment and the threatened advance of the Russian forces to its north. Major-General Orlov by 4 p. m. had posted 4 battalions and 12 guns on the crest of the heights between the Yentai mines and Fangshen. The remaining 8 battalions and 8 guns were near the mines, as was also the command of Major-General Samsonov. Major-General Orbeliani was south of Fangshen, reconnoitering to the east, and the Fifty-second Dragoon Regiment was on the heights north of Tapu.

A small party of Japanese was in Tapu, and the heights south of that village were held by a larger force, the Twelfth Brigade, Twelfth Division.

In the Pensihu region there was a desultory engagement between the cavalry of Major-General Liubavin and the Kobi Brigade of Major-General Umezawa. After the engagement Major-General Liubavin fell back to Shangpingtaitzu, where he was again joined by his 3 sotnias from Weiningying and Sanchiatzu, and by 4 battalions of infantry.

The Japanese Second Army advanced infantry and artillery to the line Yuchiachantzu-Wanpaoshan, and a battery of mortars from near Shoushanpu fired at the railroad station and the town during the afternoon.

Early on September 2 Major-General Orlov moved south along the Fangshen heights, and when northwest of Tapu came into contact with the right brigade (Shimamura) of the Japanese Twelfth Division. In a short time the Russians fell into confusion, lost heavily, and withdrew, a portion retiring west and the remainder taking up position farther north on the Fangshen heights. The Japanese continued their attack upon this latter portion, driving it also to the west. By noon the Japanese Twelfth Division occupied the line of heights from near the mines to west of Tapu. Colonel Gurko with 7 squadrons, the advance guard of the First Siberian Corps, made a demonstration from Liulinkou against these heights, and 4 batteries of the First Siberian Corps, from near the same village, opened fire, while the infantry was pushed forward sufficiently to form a rallying point for the troops of Major-General Orlov. The latter was sent forward by

Lieutenant-General Stackelberg to again attack the Japanese with a battalion of the Two hundred and fifteenth Regiment that had assembled near Hsiaotalienkou. The First and Second East Siberian Rifle Regiments also took part in this attack, which was repulsed with heavy loss. Major-General Orlov and one of his brigade commanders, Major-General Fomin, were wounded, and the command of the Fifty-fourth Infantry Division was given to Major-General Stolitzi.

Major-General Samsonov, from near the Yentai mines, had sent one of his Cossack regiments, at 11.30 a. m., to aid Major-General Orlov. This regiment also withdrew, before the advancing Japanese, to the mines, where Major-General Samsonov was reenforced by Colonel Zapolski with 2 battalions and 4 guns from the First Siberian Corps. In withdrawing from the mines, about 6 p. m., Colonel Zapolski took up a position near Sanchiatzu and Major-General Samsonov concentrated his command at Kuchiatzu.

Toward evening a panic occurred in the troops of the Fifty-fourth Infantry Division, reassembled along the branch railway, as a result of which the greater portion reassembled during the night near the Yentai station on the main railway.

For the recapture of Manjuyama (called Niezhin Hill by the Russians) Lieutenant-General Dobrzhinski directed that the Thirty-fifth Division, assisted by the brigade of Major-General Eck, should, after a sufficient preparation by artillery fire, advance against the hill. At 8 a. m. 96 guns opened fire from east of Sahutun. In the first line from left to right there were 6 companies of the One hundred and thirty-eighth Regiment, 1 battalion of the One hundred and thirty-ninth, then the One hundred and twenty-first, supported by the remaining 6 companies of the One hundred and thirty-eighth Regiment. The One hundred and twenty-third Regiment acted as reserve to the attacking force.

The One hundred and twenty-first Regiment, about noon, reached the spur southwest of Hsikuantun, driving back 6 companies of Japanese from the Fifteenth Brigade and Fourth Regiment that had advanced to this spur in the morning and which suffered severely from the Russian artillery fire during the withdrawal. The 6 companies of the One hundred and thirty-eighth Regiment, supporting the One hundred and twenty-first, advanced to the left front along the foot of

Manjuyama, came under a cross fire of infantry aided by machine guns, and was forced back a short distance with heavy loss.

In the afternoon the troops assigned for the final assault on Manjuyama comprised, on the left flank, under Colonel Istomin, commanding the One hundred and thirty-seventh Regiment, 7 battalions drawn from three different regiments of the Tenth and Seventeenth Corps; in the center, under Major-General Vasiliev, 13 battalions drawn from both corps; on the right, 7 battalions under Major-General Eck. The artillery at Sahutun was increased, and the total number of guns taking part was finally raised to 152.

About 6 p. m. the Eighty-fifth Regiment had reached a point close to the southwestern slope of Manjuyama, still held by the Japanese Fifteenth Brigade with the Third Brigade in reserve. The Russian artillery fire ceased shortly before 7 p. m. (6 p. m. by the Japanese time), and the command of Colonel Istomin assaulted the hill and made a lodgment on the crest where held by the left of the Japanese Thirtieth Regiment. The troops from the command of Major-General Vasiliev, following slightly in rear and to the right of those of Colonel Istomin, also made a lodgment on the crest where held by the right of the Japanese Sixteenth Regiment. The attacking Russians were forced back about 200 yards, where they continued firing. About 10.30 p. m. a slight advance was made against the Japanese Sixteenth Regiment by the troops of Major-General Vasiliev.

The assaulting Russians began withdrawing in small groups toward Sahutun, and reinforcements of 5 battalions from the Seventeenth Corps and 2 from the Tenth Corps were sent forward. This force was attacked on its left flank, about 3 a. m. on September 3, by 2 battalions from the Japanese Third Brigade, and the entire Russian force fell back on Choheiyentai and Sahutun.

The Third Siberian Corps had moved to Changshutun, where it was held in reserve during September 2.

On the left bank of the Taitzu the Guards Division moved to Kouchingtzu, where it endeavored to force a crossing of the Taitzu with a view to attacking Hill 1057.

The Japanese Fourth and Second Armies completed their deployment in front of the main Russian position south and

west of Liaoyang; the artillery bombarded the position throughout the greater part of the day and the infantry gradually worked forward.

About noon a counter attack was made from the Russian right by a brigade of infantry accompanied by two batteries. The Japanese infantry made an unsuccessful attack in the morning and another about sunset.

In the early morning of September 3 Lieutenant-General Stackelberg, fearing his left was being turned by the Japanese in the neighborhood of the Yentai mines, withdrew the First Siberian Corps a short distance to the southwest and took up a position with the left resting on the branch railway. General Kuropatkin then ordered the evacuation of Liaoyang.

In the Japanese First Army the Twelfth Division remained in position. The Second Division rearranged its troops, placing the Third Brigade on the right of the Fifteenth. The Guards Division, unable to force a crossing at Kouchingtzu, was ordered to leave three batteries with an infantry support at Shuangmiaotzu and to march with the remainder to army headquarters at Kuantun.

The Russians continued to hold the heights southwest of Hsikuantun and their line in front of the Japanese First Army, and began the withdrawal of the troops holding Liaoyang.

In the Japanese Fourth and Second Armies the artillery, which had advanced closer to the Russian position during the night, opened a heavy fire at dawn. The infantry reached a line that was generally about 300 yards from the Russian position and made a series of unsuccessful attacks throughout the day. About 7 p. m. the Twentieth Brigade, Tenth Division, captured redoubt No. 2 (near Yuichuangmiao) and began working forward against the gate in the city wall.

On this day the Russian storehouses in the vicinity of Liaoyang station were destroyed by fire.

On September 4 the Second Brigade (Watanabe) of the Guards Division, which had been ordered to hasten forward, arrived at Kuantun. The fighting in that vicinity, however, had ceased, the Russians having withdrawn except from Hill 917, which was evacuated by them about 10 a. m. The Japanese First Army was ordered to pursue, but had made little progress when night came. The Guards Kobi Brigade

(Umezawa) had left a small force at Shangpingtaitzu to hold Major-General Liubavin's detachment in check and with the main body had arrived at the Yentai mines at 1 p. m. on September 3. This brigade moved north and, after a skirmish northwest of Sanchiatzu, occupied the hill east of Yumentzu about 6 p. m.

The Japanese Twelfth Division, in an endeavor to advance along the branch railway, came into contact about midnight with the First Siberian Corps near Hsiaotalienkou and was repulsed after some hand to hand fighting, with considerable loss on both sides. A Russian machine gun company took part in the engagement.

By 2 a. m. on September 4 troops from the Japanese Second Army had reached the railway station and occupied a portion of the walled city, where they assisted the troops of the Fourth Army in driving out the Russians, the street fighting continuing until about 10 a. m.

The remainder of the Russians retired across the Taitzu River, destroyed the military bridges, and burned the wood-work of the railway bridge.

On September 5 in the Japanese First Army the Guards Kobi Brigade remained in position on the hill east of Yumentzu, being opposed by the echelons of the First Siberian Corps in its withdrawal to the north on the Liufangtzu-Kushutzu road. The Twelfth Division reached a line through Taliengkou, the Second Division advanced on Lotatai, the Guards Division remained in reserve.

In the Russian army on that date the First Siberian Corps was at Hungchiatien, the Second Siberian at Lantzukai, the Third Siberian at Huanshan, the Fourth Siberian at Wulikai, the Tenth at Shahopu, the Seventeenth at Shihliho. General Kuropatkin telegraphed that his army, proceeding northward, had extricated itself from the dangerous position in which its center and left flank had faced the Japanese on a narrow front.

The Japanese reported the following casualties for the battles at Liaoyang and its neighborhood:

| | |
|------------------|---------|
| First Army..... | 4, 866 |
| Second Army..... | 7, 681 |
| Fourth Army..... | 4, 992 |
| Total..... | 17, 539 |

Of these casualties there were 136 officers killed and 494 wounded.

The Russian General Staff reported 54 officers and 1,810 men killed, 252 officers and 10,811 men wounded, 5 officers and 1,212 men missing.

For the month of August (August 14 to September 13, new style), 1904, the Russian medical reports gave 91 officers killed and 477 wounded, 2,243 men killed and 15,379 wounded, this exclusive of the losses at Port Arthur.

BATTLE OF SHA RIVER.

(Plate XI.)

After the battle of Liaoyang the Japanese occupied a general front through Yentai Station and the mines, extending from the Hun River on the left eastward to Pensihu on the Taitzu River, the outposts being several miles farther north. The First Army was on the right and extended from the Yentai mines to Pensihu. The Guards Kobi Brigade (Umezawa) was in advance of the Pensihu district, which seems to have been held by weak detachments of service troops. The Guards Division was near Hsiaotalienkou, the Second Division near the Yentai coal mines, the Twelfth Division near Tapu. The Second Cavalry Brigade, under Major-General Prince Kanin, operated on the right.

The Fourth Army occupied the line from the Yentai mines to the railroad; the Second Army occupied the line to the west of the railroad. The First Cavalry Brigade, under Major-General Akiyama, was on the extreme left. A large portion of the divisional cavalry of the Japanese Second Army was under his command during the battle.

The general reserve consisted of 3 Kobi brigades and the Second Artillery Brigade, containing the Sixteenth, Seventeenth, and Eighteenth Regiments.

The only severe engagement between the opposing forces during the remainder of September was in the neighborhood of Shangpingtaitzu, where the Japanese detachment was attacked on September 17 at noon by a mixed brigade coming from the direction of Fushun and Mukden. After a severe engagement, lasting until night, the Russian force withdrew.

On October 2, 1904, General Kuropatkin issued an order

announcing his intention to take the offensive. The troops at his immediate disposal were reported to consist of 261 battalions (181,400 bayonets), 143 squadrons and sotnias, 864 guns, 32 machine guns, and 41 sapper companies. The Japanese forces confronting this army consisted practically of those organizations that had taken part in the battle of Liaoyang, and which had again been raised to full strength, and a corresponding number of Kobi organizations. The Eighth Division arrived during the battle, in which it appears to have taken part only as reserve, raising the total to from 164 to 170 battalions, 50 squadrons, 558 field and mountain guns, 10 siege guns, and 38 howitzers and mortars.

In the Russian Army the left wing, Eastern Detachment, was commanded by Lieutenant-General Stackelberg and consisted of the First, Second (Fifth East Siberian Rifle Division and Two hundred and thirteenth Infantry Regiment), and Third Siberian Corps, one brigade of the Fourth Siberian Corps, and the Siberian Cossack Division (Major-General Samsonov); 73 battalions, 34 sotnias, 164 guns, 32 machine guns, and 16 sapper companies.

The right wing, Western Detachment, was commanded by General Bilderling (Lieutenant-General Volkov was temporary commander of the Seventeenth Corps) and consisted of the Tenth and Seventeenth Army Corps; the Fifty-first and Fifty-second Dragoon Regiments; one-half of the Orenburg Cossack Division and the Ural Cossack Brigade (Major-General Grekov); 64 battalions, 26 squadrons and sotnias, 224 guns, and 8 sapper companies.

Lieutenant-General Dembovski's detachment, containing the Two hundred and fifteenth, Two hundred and sixteenth, and Two hundred and Eighty-fourth Infantry Regiments, the Twenty-eighth Artillery Brigade, the Caucasus Cavalry Brigade, the First Argunsk Cossack Regiment, the Fourth Transbaikalian Cossack Battery (12 battalions, 16 sotnias, 32 guns, and 2 sapper battalions) was on the right bank of the Hun and operated in conjunction with the Western Detachment in the later stages of the battle.

The Sixth Siberian Corps (Lieutenant-General Sobolev, 32 battalions, 8 sotnias, 96 guns, and 3 sapper companies) was between Tieling and Mukden, and became a part of the Western Detachment in the later stages of the battle.

The general reserve consisted of the First Army Corps and the Fourth Siberian Corps (less one brigade); 56 battalions, 6 sotnias, 230 guns, and 7 sapper companies.

Major-General Mishchenko's Transbaikal Cossack Brigade, containing 23 sotnias and 8 guns, operated in front of the general reserve and connected the two wings in the early stages of the battle.

On the extreme right was the Liao River Detachment, commanded by Major-General Kossagovski and containing the Two hundred and eighty-first Infantry Regiment, Fourth Siberian Infantry Regiment, Amur Cossack Regiment; 6 battalions, 3 sotnias, and 12 guns.

On the extreme left was Lieutenant-General Rennenkampf with a mixed command (Eck, Pieterov, and Liubavin) consisting of troops from the Fifty-fourth and Seventy-first Infantry Divisions and the Second Brigade (Liubavin) of the Transbaikal Cossack Division; 14 battalions, 18 sotnias, 32 guns, and 1 sapper company.

There was also a detachment under Colonel Madritov, still farther east, containing 1 battalion and 6 sotnias, operating against Saimachi.

The effective strength of the Russian army was about 200,000; that of the Japanese, about 170,000.

The Russian plan was to move forward on the left, seize Pensihu, and then advance down the valley of the Taitzu against the Japanese prepared positions in the Yentai region. On the right General Bilderling was to advance along the Mandarin road and the railway toward Liaoyang. General Mishchenko was to maintain communications between the wings and was to be followed by the general reserve. In the Western Detachment each echelon was to intrench each position occupied.

The Russians advanced in several columns on a front reaching from west of the railway east to Fushun, and drove in the Japanese outposts after some skirmishing, in which the losses were slight on both sides. On October 6 they reoccupied Shaho station, and their railway troops restored the bridge over the Sha River the next day.

At dusk on October 7 Umezawa's brigade began to withdraw from the vicinity of Pienniulupu and arrived at Liu-

shakou the next morning. Two companies were stationed at Tumentzuling, 3 battalions and 4 guns at Taling, and 1 regiment and 2 guns were sent to the range of heights separating Pensihiu from the small river flowing into the Taitzu near Weiningying. Before the arrival of the latter detachment the advance guard of Rennenkampf's force had driven back a Japanese outpost on the height west of Weiningying.

In the evening of October 8 the Twelfth Japanese Division was ordered to march (it was then near Wangkouyuling) farther east, and the division commander, Lieutenant-General Inouye, was placed in command of troops in the Pensihiu district.

On October 9 one brigade of Eck's division and Liubavin's Cossack brigade of Rennenkampf's command crossed the Taitzu River at Weiningying, cut the communications of the troops at Pensihiu and vicinity with their base at Hsihoyen, and intrenched. In the Eastern Detachment the Third Siberian Corps was at Kaotaitzu attacking the heights to the west; the First was at Hsiaoshihchiaotzu, with advance guards near Taling and Tumentzuling; the Second was at Piennilupu. General Mishchenko was at Tapu; the Fourth Siberian Corps was at Haniutun, with advance guards at Mienhuapu and Hsiaoliuhotzu. Lieutenant-General Zarubaiev, with three-fourths of the Fourth Siberian Corps, was given command also of Mishchenko's troops and the left brigade of the Third Division (Lieutenant-General Mau), Tenth Corps, and began to intrench. Two regiments of the Fourth Siberian Corps intrenched east of Hanlashantzu, one south of Shangliuhotzu, and two southwest of Pachiatzu and Mienhuapu. General Mau's brigade was in echelon back of the right flank of this line on the heights northwest of San-chiatzu, and General Mishchenko's brigade was sent to Mienhuapu to maintain communication with the Eastern Detachment. The First Army Corps was in the Erhtaokou region.

The advance troops of the Tenth Corps occupied Kushutzu and the hill to the west after a short skirmish. The main body was on the Shihli River. The Seventeenth Corps also was at the Shihli River to the west of the Mandarin road, advance troops occupying Wulitaitzu and Erhtaitzu. General Grekov's division was in the neighborhood of Tatungshanpu. The Sixth Siberian Corps, which concentrated near Tasu-

chiapu, Laishengpu, and Tatai on the 7th, advanced about 2 versts and sent one brigade as advance guard to Hsiao-shuluitzu. The First Brigade of the Fifty-fifth Division was occupying Tiehling and Mukden. Lieutenant-General Dembovski was at Changtan.

In addition to the severe fighting near Pensihu on October 9, there were numerous skirmishes along the entire line of the opposing armies. On the night of the 9th the First Siberian Corps began the attack on Taling and Tumentzuling, one brigade on each pass.

On October 10 the severe fighting continued in the neighborhood of Pensihu. The Russians in a night attack assaulted and carried the height west of Weiningying and the one east of the road leading from Pensihu to Hualienkou. They also continued the attack on Taling and Tumentzuling and opened an artillery fire on the Second Division, to which the Japanese artillery replied. Liubavin's brigade, from the south bank of the Taitzu, endeavored to cross and advance against the heights southwest of Pensihu. The Japanese Second Cavalry Brigade was ordered to March from Huiyao to Hsihoyen.

The Japanese Fourth and Second Armies began to advance, skirmishing with the opposing Russians. In the Fourth Army the Tenth Division occupied the heights east of Yumentzu; the left of the Fifth Division, in conjunction with the right of the Third Division, Second Army, attacked Wulitaitzu. The reserve division, of 3 Kobi brigades, was on the right of the Fifth Division. In the Second Army the left of the Third Division and right of the Sixth Division occupied Erhtaitzu, the left of the Sixth Division occupied Tatungshanpu. The Fourth Division, after some skirmishing, reached the vicinity of Yangchiachiantzu. The First Cavalry Brigade was at Chentanpu with a detachment at Heikoutai.

Of the Russian troops on this part of the field the Seventeenth Corps withdrew its advanced troops from Erhtaitzu and Tatungshanpu to the line Shihliho-Entehniulu-Hsiao-tuntai, holding this line with the Third Division and keeping the Thirty-fifth Division in reserve near Liutunkou. Major-General Grekov's Cossack division was near Litajentun. Colonel Stakhovich, commanding the Fifty-second Dragoon

Regiment, who was reenforced several times during the battle by detachments of infantry, connected the right of the Seventeenth Corps with the left of Grekov's division.

The movements of the Japanese on October 10 had followed an order, issued by Marshal Oyama at 10 p. m. on October 9, in which he said:

I shall attack the enemy before he completes his deployment and drive him back to the line Kangtolishan-Fengchiapu-Litajentun. The Twelfth Division and the Guards Kobi Brigade will advance on Hsiaoshihchiaotzu, and the main body of the First Army on Fengchiapu as soon as Wulitaitzu, on the Mandarin road, has been captured by the Fourth Army. The latter will march on the morning of October 10 in the direction of Ninkuantun; the Second Army against the line Panchiaopu-Litajentun. The latter will place strong reserves in rear of its right flank. The left wing will advance more rapidly than the right and undertake an enveloping movement.

On October 11 the Japanese in the forenoon recaptured the heights east of Pensihu and the one east of the road near Hualienkou. The Russians returned to the attack in this region and extended the severe fighting to the Taling and Tumentzuling regions, the First Siberian Corps reenforcing its first line. The Second Siberian Corps was in reserve at Hsiaoshihchiaotzu.

There was but little change in the relative positions of the Japanese First Army and the opposing Russians except on the extreme left of the former where the Fifteenth Brigade, moving in conjunction with the right of the Tenth Division, captured Temple Hill (also Sanchiatzu toward night) and repulsed the Russian counter attack made shortly after dark. The Tenth Division attacked Sankuaishihshan, held by a portion of the brigade of the Thirty-first Division under General Mau.

This reverse to the right flank of General Zarubaiev's line caused a suspension of the intended attack by the Russian Tenth Corps on Kushutzu and the height about 1 mile farther west, out of which positions the advance guard of the Tenth Corps had been driven that morning. The Japanese had begun to advance from these points and thus met the attack of the Tenth Corps. The One hundred and thirty-eighth Regiment and two batteries of the Thirty-fifth Artillery Brigade had been sent to Shihliho to assist the Tenth Corps, permitting the latter to use its entire reserve in strength-

ening the main line on the Shihli River, and extending it toward the right of General Mau's brigade at Yingpan.

In the Japanese Second Army the left of the Third Division and the division reserve attacked the Entehniulu section from Tsaotaitzu and Erhtaitzu. The first assault, about 2 p. m., failed. A second assault was made and the village captured about 5 p. m.; the assaulting troops, having been reenforced from the army reserve, also carried Hsiaolankou. The Sixth Division occupied Yangchiawan, from which Colonel Stakhovich withdrew to Peiyentai, about noon and the Fourth Division occupied Sanchiatzu, with a detachment near Tatai where occurred a skirmish with a detachment of the Sixth Siberian Corps, the main force of which was now on the line Talientun-Hsiaosholuitzu. General Grekov's cavalry had withdrawn to the north and west to meet the movements of the Japanese First Cavalry Brigade.

During the night of October 11 General Zarubaiev intrenched his main line on the heights north of Shangliuhotzu and Hsiaoliuhotzu. The Seventeenth Corps commander, General Volkov, sent from his reserve the One hundred and thirty-ninth Regiment and two battalions of the One hundred and fortieth Regiment against Entehniulu. This force carried the village by a bayonet charge about 11 p. m., inflicting severe loss on the Japanese Thirty-third Regiment. The Japanese intrenched near the eastern and southern outskirts of the village.

The Second Brigade of the Fifty-fifth Division, Sixth Siberian Corps, was sent to Liutunkou during the night and placed under the commander of the Seventeenth Corps, the reserve of which had been depleted by the detachment sent against Entehniulu.

NOTE.—The various movements that had taken place left the distribution of troops on the Russian right flank as follows:

On the line Talientun-Hsiaosholuitzu was the main force of the Sixth Siberian Corps.

Under Colonel Stakhovich, at Peiyentai, were the Fifty-second Dragoon Regiment, 2 battalions of the One hundred and fortieth Regiment, one-half battalion of the Eleventh Regiment, 1 battery of the Thirty-fifth Artillery Brigade, 2 guns of the Third Artillery Brigade, and a volunteer detachment from the Tenth Regiment.

General Grekov's cavalry prolonged the line to the west through Peilintai, and the troops under Dembovski were at and near Changtan.

In the section Hsiaotuntai-Tuntai-Lantzukai were 1 battalion of the One hundred and thirty-seventh Regiment, 2 battalions of the Tenth Regiment, the Ninth Regiment, 6 companies of the Twelfth Regiment, and 2 batteries of the Third Artillery Brigade.

In Entehniulu was the One hundred and thirty-ninth Regiment. On the north bank of the Shibli River at this village and in Lunwanmiao were 2 battalions of the One hundred and fortieth Regiment and 1 battalion of the Tenth Regiment.

Between Lunwanmiao and Shihliho were 1½ battalions of the One hundred and thirty-eighth Regiment, 2 battalions of the Twelfth Regiment, and 2 batteries of the Third Artillery Brigade.

In Shihliho were 2½ battalions of the Eleventh Regiment, 6 companies of the One hundred and thirty-eighth Regiment, 2 companies of the Twelfth Regiment, 3 batteries of the Thirty-fifth Artillery Brigade, and 2 batteries of the Third Artillery Brigade.

At Wulikai were 1 battalion of the One hundred and thirty-eighth Regiment and 2 squadrons of the Fifty-first Dragoons.

In the Seventeenth Corps reserve at Liutunkou were 3 battalions of the One hundred and thirty-seventh Regiment, 4 batteries of the Thirty-fifth Artillery Brigade, and, after 10 a. m. on the 12th, the Second Brigade of the Fifty-fifth Infantry Division, Sixth Siberian Corps.

On October 12 the severe fighting continued with but little change in the relative positions of the two combatants in the neighborhood of Pensihu, Taling, and Tumentzuling. The Japanese Second Cavalry Brigade, with its machine-gun company defeated Liubavin's infantry reserve near Taotingshan, and thus greatly aided the Japanese in the neighborhood of Pensihu, who up to this time had been hard pressed.

Beginning in the early morning the Guards Division carried the heights south, and later those north, of Pachiatzu. Colonel Kasa, with the Guards and Second Division cavalry regiments, was sent to Mienhuapu to protect the rear and right flank of the Guards from the troops of Mishchenko, who had fallen back to Sikou.

In the Japanese Second Division the Third Brigade in the early morning completed the capture of Sanjoshishan and the entire division attacked the heights of Hsiaoliuhotzu and Shaotaku, the Fifteenth Brigade being directed against Rokoshan.

In the Japanese Fourth Army the Tenth Division and 3 Kobi brigades captured Sankuaishihshan in the early morning, relieved the Thirtieth Regiment, Second Division, at Nanshan, and made an unsuccessful night attack on Shiroyama. In front of the Russian Tenth Corps the Japanese confined

their efforts to an artillery fire. The Russian troops from Sankuaishihshan halted on the main line from the hill south of Hamatan to Tsaichiattun. The detachments of Yingpan and Takou retired to Shingchuang. By night the main position of the Tenth Corps was Hunpaoshan-Ninkuantun.

In the Japanese Second Army the right of the Third Division attacked Shihliho and Wulikai station at daybreak; the left of the Third Division and right of the Sixth Division attacked Entehniulu; the left of the Sixth Division attacked Tuntai. The Fourth Division, reenforced from the army reserve, operated against the detachment of Colonel Stakhovich at Peiyentai and, in conjunction with the First Cavalry Brigade, against the cavalry of General Grekov farther west.

The attack of the Third and Sixth Divisions made little progress until about 10 a. m. The Fourth Division had gained ground so as to attack Peiyentai from the south and west, and this enabled the left of the Sixth Division to advance to the junction of the two streams north of Hsiaotuntai. Utilizing the valley of the creek coming from Chengchia, the Sixth Division continued its advance and captured Lantzukai and the 16 guns of the First and Second Batteries of the Third Artillery Brigade shortly before noon. Two unsuccessful attempts were made by the Russians to recapture the guns. The first attempt was made by the troops of the Lantzukai-Tuntai section; the second was made about 12.30 p. m. by the Two hundred and nineteenth Regiment from Chengchia and 1 battalion of the One hundred and thirty-eighth Regiment from Wulikai. In repulsing these attacks the Sixth Division was aided by a reserve brigade which arrived from the Second Army reserve and crossed the Shihli River at Tuntai to move on Liutunkou. This brigade was brought to a stand on the right bank of the river and bivouacked near Tuntai.

In the meantime the Third Division had made two unsuccessful assaults on Shihliho and Entehniulu, the first about noon, the second about 2.30 p. m.

At 3.50 p. m. General Volkov issued an order directing his troops to hold their positions until dark and then to retire. The Thirty-fifth Division was to occupy the line Panchiaopu-Chengchia, its left connecting with the Tenth Corps, the Third Division in reserve at Shulingtzu; the brigade of the

Fifty-fifth Division to extend the line from Chengchia toward Hunlinpu; the detachment of Colonel Stakhovich to hold Hunlinpu and connect with the main body of the Sixth Siberian Corps. The progress of the battle, however, prevented the execution of this order. The capture of Lantzukai facilitated the operations of the Japanese Third Division, which by sunset had carried Panchiaopu and Wulikai. The right of this division, in conjunction with the left of the Fifth Division, captured 4 guns of the Russian Third Artillery Brigade west of Shihliho during the afternoon. The disaster to the Seventeenth Corps caused the Tenth Corps to withdraw during the night from the Hunpaoshan-Ninkuantun position.

The Japanese Fourth Division drove the detachment of Colonel Stakhovich from Peiyentai and occupied that village about 4 p. m. A Russian detachment from the Sixth Siberian Corps, coming from Wangchuanztzu, attacked the Japanese at Tapingchuang and Litajentun, compelling the Japanese to reenforce the troops at the latter village by a detachment from the First Cavalry Brigade.

On October 13 the Japanese in the Pensihu region found that the Russians in their front had retired during the night, Rennenkamp's command having withdrawn up the valley of the Taitzu, the Third Siberian Corps to Lichiaowoping en route to Kaotuling. Matsunaga's brigade, Second Division, attacked Chaohsienling, to which point it had marched the preceding night, and where it was in turn attacked by the Russians and hard pressed until the arrival of reenforcements. In the Guards Division the right brigade penetrated to the height south of Maerhshanputzu. Here it was attacked by a detachment of the Second Siberian Corps, advancing by way of Maerhshanputzu, and by a detachment from the left of the Fourth Siberian Corps, the main force of which was attacking the left brigade of the Guards Division on the southern portion of Maerhshan. A portion of the latter attack penetrated the interval between the two brigades, but was brought to a stand by the Fourth Guards Infantry, then in the division reserve, which succeeded in holding the small hill southwest of Houchiatunnankou.

Colonel Kasa's detachment and the Third Regiment, Guards Division, occupying the heights from east of Nankou

to west of Sikou, repulsed a Russian attack from Waitoushan. The Japanese Fifth Division, less one regiment, was sent from Kushutzu to Sanchiatzu and placed under the commander of the First Army. The Fifteenth Brigade, Second Division, carried the heights of Rokoshan and Shiroyama and then the ridge from Shiroyama to Yangchenchai, where it repulsed a night attack.

This night attack covered the withdrawal of the Fourth Siberian Corps to the right bank of the Sha River. The Thirty-seventh Division, First Army Corps, had been placed in the line between the Fourth Siberian and the Tenth Army Corps on the 10th, and with the Twenty-second Division, First Army Corps, remained on the left bank of the Sha River.

In the Japanese Fourth Army the Tenth Division and three Kobi brigades advanced as far as Manchiafin and Huchiakuchiatzu, the opposing Thirty-seventh Division falling back to the line of heights north of Hamatan, east of Tungshankou and north of Tungshantzu. A detachment from the left of the Fourth Army attacked toward Huanhuatien; otherwise the action of this army against the various positions held by the Tenth Corps was limited to artillery fire.

In the Japanese Second Army the Third Division, reinforced by a regiment of infantry and one of artillery, turned to the right and attacked Huanhuatien in conjunction with the left of the Fourth Army. When north of Pachiatzu the flank of the Third Division was attacked by troops of the Tenth Corps from Lamutun and Wukaontzu. The Third Division was then ordered to attack to the north but night came before the new attack was well developed. At the same time the artillery of the Sixth Division, the front of which had been cleared by the withdrawal across the Sha of the Seventeenth Corps, and one of its brigades, with the general reserve at Liutunkou, was ordered to attack Huanhuatien in conjunction with the left of the Fourth Army. This attack, also, was but slightly developed when night came. The other brigade of the Sixth Division occupied Shulingtzu about 11 a. m. and at sunset was confronting the Russians at Lamutun.

The Fourth Division advanced to the line Kihsiaotun-Changlingpu and began developing toward Linshengpu. The First Cavalry Brigade concentrated at Sanchiatzu where it repulsed an attack of about 600 Russian cavalry.

To close the gap between the Eastern Detachment and the Fourth Siberian Corps, caused by the withdrawal of the latter across the Sha River, General Kuropatkin ordered two regiments of the Second and all the First Siberian Corps to move from east to west.

After withdrawal to the Sha River the Seventeenth Corps occupied a line from Lamutun through Linshengpu to Talientun; the One hundred and thirty-seventh Regiment was to the west of the railway, with 2 battalions of the One hundred and thirty-ninth Regiment as reserve; 14 companies of the One hundred and thirty-eighth Regiment held the line from the railway to Lamutun; the Thirty-fifth Artillery Brigade was between the railway and a line running from Linshengpu to Ssufangtai; the One hundred and fortieth Regiment was north of Yinkua; the greater part of the Third Division and the Third Artillery Brigade were on the line Ssufangtai-Kuchiatzu.

The various fractions that had been with Colonel Stakhovich rejoined the Seventeenth Corps during the day.

The first line of the Seventeenth Corps thus prolonged the line held by the Tenth Corps, Wukaontzu-Kuchiatzu-Changlingtzu. The Sixth Siberian Corps, which, while being in echelon behind the right flank of the Seventeenth Corps, had been a part of the general reserve of the army, was now placed under the orders of the commander of the Western Detachment and ordered to prolong the line of the Seventeenth Corps in echelon westward through Talientun and Hsiaosholuitzu. Dembovski's command was still farther to the west, apparently at and near Changtan.

For the next day an offensive movement by the Western Detachment was ordered. The Tenth and Seventeenth Corps were to hold their positions even against assault. The Sixth Siberian Corps was to advance against and capture Hunlinpu and Peilintai. Lieutenant-General Dembovski was to advance to the line Fuchiachuang-Paohsiantun-Tahantai.

On October 14 in the Japanese First Army reinforcements from Saimachi reached Hsihoyen, following a similar body that had arrived on the night of the 13th and reinforced the Twelfth Division. Detachments from the Twelfth and Guards Divisions attacked and carried the height west of Sikou. General Mishchenko's brigade and one regiment withdrew across the Sha River in front of the Guards Division, which advanced and occupied the hills south of Fengchiapu. The Fifteenth Brigade, Second Division, advanced to the heights north of Miaokou and then, after a slight engagement, to Tainshutun, the Russians withdrawing across the Sha River.

In the afternoon the Russians began withdrawing from the Chaohsienling region and were followed by the Japanese. The Japanese Twelfth Division marched on Hsiaoshihchiaotzu, being followed by the Guards Kobi Brigade; the Third Brigade, Second Division, marched on Hsiaopingtaitzu, the Second Cavalry Brigade on Hsiaochiahotzu. Of the opposing Russians the Fifth East Siberian Division was at Pien-niulupu, the First at Yangmulingtzu, the Ninth at Kangtolishan, the Third Siberian Corps at Kaotuling. The Ninth East Siberian Division, followed by one brigade of the Fifth, marched via Hsiaoyangtun to Liushihtaitzu.

The Japanese Fourth Army attacked in the directions of Hsinglungtun and Putsaoyai, subsequently reaching the Sha River.

In the Japanese Second Army one brigade of the Sixth Division, cooperating with the left of the Fourth Army, occupied the hill north of Huanhuatien and then endeavored to carry Santaokangtzu, but was unable to do so before night.

About 3.30 a. m. troops of the Third Division made an unsuccessful attack on Houchaishan, held by the Thirty-fourth and One hundred and twenty-third Regiments. About 5 a. m. an unsuccessful attack was made on Wukaontzu. About 6.30 a. m. the Third Division assaulted and, about 7.30 a. m., after very severe fighting, carried Houchaishan, thus piercing the line held by the Tenth Corps, and then Wukaontzu, north of which the Japanese captured the second group of the Ninth Artillery Brigade, 23 guns. A detachment of the Third Division continued to and occupied Shahopu about 8 a. m., the portions of the Tenth Corps in the intrenchments

between Wukaontzu and Lamutun withdrawing to the right bank of the Sha River. This Japanese detachment was brought to a stand at Shahopu by an attack of the Thirty-sixth Regiment which had rejoined the Tenth Corps from Yinkua that morning.

The Fourth Division repulsed three determined attacks by the Sixth Siberian Corps on Changlinpu, and sent a portion of its right, in cooperation with the Twenty-fourth Brigade, Sixth Division, against Linshengpu and the line leading from that village to Talientun. The Japanese carried all of Linshengpu but the northern part, and the Russians remaining on the left bank of the Sha River between the railroad and Linshengpu retired to the right bank. Six companies of Russians made a counter attack on Linshengpu, but could not advance beyond the northern outskirts of the village.

The main body of the First Cavalry Brigade concentrated at Peilintai, presumably because of Dembovski's advance.

On October 15 the main body of the Japanese First Army was at the Sha River. The Guards Kobi Brigade was ordered to march to Sanchiatzu.

The Fifth Division, which had returned to the Japanese Fourth Army, replaced the troops of the Sixth Division that were between Changlingtzu and Santaokangtzu and, in conjunction with the right of the Third Division, completed the occupation of the remaining territory in that vicinity as far as the Sha River, carrying Lone Tree Hill toward morning of the 16th and capturing 2 guns. The right brigade of the Third Division later attacked North Shahopu and, failing to drive the Russians out, remained facing their opponents, who later withdrew to the line Kuantun-Shanlantzu.

The Japanese Sixth Division concentrated on its left brigade and attacked Lamutun and the line leading from that village to Linshengpu and thence toward Talientun. After a hard fight the Japanese carried Lamutun about 5 p. m., remaining there for the night. The Japanese Fourth Division extended its left to Wangchuangtzu while continuing to hold its position of the 14th. The Sixth Siberian Corps, facing the Japanese Fourth Division, prolonged the Russian line from Talientun through Chitaitzu and Sanchiatzu, and Dembovski's detachment occupied the region Fuchiachuang-Paohsiantun-Yangshulingtzu.

The First Cavalry Brigade, with one mounted battery, was attacked by the Russian cavalry near Litajentun, and retired to Tapingchuang at dark.

On October 16 there was no important engagement in front of the Japanese First Army. The Second Japanese Cavalry Brigade, after a skirmish near Kaotuling, retired to Kao-kuanchai. The Second Division concentrated near Tain-hsiangtun. A Russian detachment from the Fifth Siberian Division crossed the Sha River and occupied the heights of Waitoushan.

The Nineteenth, Twentieth, and Thirty-sixth East Siberian Regiments, and the Eighty-seventh and Eighty-eighth Regiments, First Army Corps, assisted by the fire of the Eighty-sixth Regiment, shortly after sunset assaulted and carried Lone Tree Hill (including the portion called Novgovod Hill), held by Major-General Yamada's brigade, Fifth Division, capturing 14 guns and killing over 1,000 Japanese, with a loss to themselves of about 3,000 in killed and wounded. A considerable portion of the Russian loss resulted from the fire of the Eighty-sixth Regiment, which was unable to see in the darkness the distance to which the assault had been carried.

The height was named Putilov Hill, in honor of Major-General Putilov, who commanded the Russian forces engaged in its recapture.

The new line taken up by the Fifth Division extended from near Putsaoyai to Nankangtzu.

Several unsuccessful attacks were made on Linshengpu by detachments from the Russian Seventeenth Corps assisted by its artillery, which about noon turned its fire upon Wang-chuangtzu, held by the left of the Fourth Division, which was then unsuccessfully attacked by a regiment of the Sixth Siberian Corps coming from Sanchiatzu.

The main body of the First Cavalry Brigade was at Hsiao-tai, a detachment reoccupying Litajentun.

On October 17 there was a reconnaissance by a regiment of Russians south of Pienniulupu, while the Japanese continued a desultory attack upon Waitoushan. There was no change of positions or important engagement in front of the Japanese Fourth Army until night, when the Japanese made an unsuccessful attempt to recapture Putilov Hill. In the Japanese Second Army the Third Division was strongly attacked about

11.30 a. m. After the attack, the right wing of the division remained about 600 yards, the left wing about 300 yards, from the Russians on the opposite bank of the Sha River.

About midnight Linshengpu, occupied by the left of the Sixth and right of the Fourth Divisions, was unsuccessfully attacked by about one battalion of Russians. During the day the Fourth Division, giving up Linshengpu to the left of the Sixth Division, occupied a line from Kihsiaotun to the southwest of Wangchuanztzu.

The main body of the First Cavalry Brigade remained at Hsiaotai, detachments occupying Litajentun, Chentanpu, and Heikoutai. The Russians continued intrenching the line through Talientun, Chitaitzu, and Sanchiatzu. Dembovski's detachment moved north to take position in echelon behind the Sixth Siberian Corps.

On October 18 there were some unimportant skirmishes in front of the Japanese First Army, some small attacks in the early morning against the Fourth Army, and an intermittent artillery fire in front of the Second Army, the extreme left of which was attacked about noon by about 500 infantry. The Sixth Siberian Corps occupied the line Ssufangtai-Kuanlinpu. Dembovski's detachment occupied Pienchengztzu.

On October 19 a detachment of the Guards Division drove some Russian cavalry from Shiuchiafan, and was in turn driven out by a detachment of Russian infantry. In front of the Fourth Army there was only an intermittent artillery fire. At night the troops of the Third Division withdrew from South Shahopu, abandoning one of the captured Russian guns, and took up a new position farther south and less threatened by enfilade fire from Putilov Hill. The entire Second Army was subjected to a rather severe fire shortly after sunset, but no attack followed.

On October 20 there were some slight demonstrations by the Russians to the east of Pensihu, a desultory cannonade in front of the Japanese Fourth and Second Armies, especially in the neighborhood of Shahopu, and some harassing of the First Cavalry Brigade, which retired to Litajentun.

The battle of Sha River may be said to have terminated on October 20. Engagements of greater or less severity continued to occur almost daily between the opposing armies, which continued with but little change in their relative

positions to face each other, strengthening their positions as rapidly as possible with shelter trenches and field works. From Linshengpu the line of separation ran west. The Russians continued to hold Putilov Hill and Waitoushan, both on the left bank of the Sha River, which otherwise above Linshengpu separated the opposing armies. From Pienniulupu, strongly fortified, the Russian line extended northeast and then east for a distance of about 10 miles.

The Japanese reported the capture of 709 prisoners, 45 guns, 37 ammunition wagons, 5,474 rifles, 6,920 rounds of gun ammunition, 78,000 rounds of small-arm ammunition, and various other articles.

The Russians reported the capture of 9 field and 5 mountain guns and various other articles; also the recovery of one of the guns that had been captured from them.

The Japanese reported their loss as 15,879 killed and wounded. The Russians reported their loss as 190 officers and 4,894 men killed, 861 officers and 29,531 men wounded, and 35 officers and 5,838 men missing.

Prior to and coincident with the battle of Sha River there was a demonstration by the Russians against Hsienchang, with several resulting skirmishes. The attack began on October 7 and continued without much change until about 3 a. m. on the 10th, when the Japanese detachment made an attack and drove the Russians back toward the northeast.

After the battle of Sha River the opposing armies faced each other without material change of positions and without any engagement on a large scale until the battle of Chenttanpu. There were, however, for sometime almost daily encounters of greater or less magnitude.

On October 27 a portion of the Guards Division assaulted and carried Waitoushan, capturing 2 machine guns, thus completing the occupation by the Japanese of the left bank of the Sha River in the neighborhood of Pienniulupu.

On November 24 the Japanese from Hsienchang (Ninth Kobi Brigade) attacked a Russian position near Chinghochan occupied by a portion of Rennenkampf's command. The fighting continued into the night of the 24th, and was renewed on the 25th, 26th, and 27th, when the Japanese withdrew. They were followed and attacked by the Russians about six miles farther south and were again driven back.

RAID ON YINGKOU.

Early in January, 1905, a force was concentrated, under command of Major-General Mishchenko, for a raid around the Japanese left flank.

The composition of the force was as follows:

1. The Ural-Transbaikal Cossack Division. The Ural Brigade contained the Fourth and Fifth Ural Cossack Regiments, each less one sotnia; the Transbaikal Cossack Brigade contained the First Chita Cossack Regiment and the First Verkhne-Udinsk Cossack Regiment, less one sotnia.

2. The Caucasus Cavalry Brigade, containing the Second Daghestan Regiment, 5 sotnias of the Terek-Kuban Regiment, and 4 machine guns.

3. The Fourth Division of Don Cossacks, containing the Twenty-fourth, Twenty-fifth, and Twenty-sixth Regiments.

4. The Second Independent Dragoon Brigade, containing the Fifty-first and Fifty-second Regiments.

5. Four squadrons from the Maritime Province Dragoons.

6. One sotnia of scouts, drawn from various organizations and under the commander of the expedition.

7. Four half sotnias of frontier guards.

8. Four companies of mounted scouts of 100 men each, drawn from the First Siberian Corps.

9. The First and Second Transbaikal Mounted Cossack Batteries, the Twentieth Mounted Battery, one-half of a Frontier Guard mounted battery; total 22 guns.

10. A section of sappers, mounted and attached to headquarters.

11. The train, comprising 2 ambulances, 1 column of pack litters, and 5 provision columns, containing 1,500 pack animals.

On January 8, 1905, this force moved south from Ssu-fangtai in three columns.

The right column (Major-General Samsonov) contained 16½ squadrons and sotnias and 10 guns; the center column (Major-General Abramov) contained 16½ sotnias, 4 companies of mounted scouts, and 6 guns; the left column (Major-General Telichev) contained 29½ sotnias, 6 guns; the convoys, escorted by the First Chita Regiment, followed the center column; three detachments of from 35 to 40 men, charged with the destruction of the railway north and south

of Haicheng and at Tashihchiao, were attached to the left column.

On January 10 small detachments of Japanese convoying supply columns were defeated and at night a detachment cut the telegraph lines and slightly damaged the railway near Haicheng.

On the same day the advance guard occupied Newchwang, from which the Japanese garrison of 1 company and 2 squadrons withdrew.

On the 11th the Russian columns advanced on Yingkou and made an attack shortly before night, the artillery fire starting a conflagration in some of the Japanese storehouses. The attack continued until the arrival by rail of some Japanese infantry from Tashihchiao, when the Russians retired. On the 13th the Russians crossed to the right bank of the Liao River and on the 14th their right column was attacked by a Japanese force and suffered considerable loss. On the 15th the retreating Russians gained contact with the Fourteenth Division, Eighth Corps, that had been sent to their assistance.

During the raid the Russians captured 1 officer, 14 men, and about 500 provision carts. They reported their losses as 39 officers and 331 men killed, wounded, and missing.

BATTLE OF CHENTANPU OR HEIKOUTAI.

(Plate XII.)

At the battle of Chentanpu (Sandepu) the Second Russian Army, commanded by General Gripenberg and forming the extreme Russian right, consisted of the Tenth, Eighth, and First (Siberian) Corps; the First, Second, and Fifth European Rifle Brigades, forming a Rifle Corps; a mixed force, under Major-General Kossagovski, consisting of two regiments of infantry, 2 squadrons, and 2 horse batteries; 8 regiments of cavalry and 4 horse batteries under Major-General Mishchenko; a total of about 84,000. The Tenth and Eighth Corps extended from Yamandapu westward to and across the Hun River, passing south of Shoukuanpu, with the Fourteenth Division, Eighth Corps, on the right bank of the Hun; the First Siberian Corps was west of the Hun River, in the vicinity of Ssufangtai; Kossagovski's command was on its

right and Mishchenko's command still farther west at Tahoangchipu, with reconnoitering detachments reaching to the Liao River; the Rifle Corps was in reserve.

The general movement, a wheel to the left with the Tenth Corps as a moving pivot, began on January 24, 1905.

General Mishchenko moved in two columns south to near Mamikai, where he was joined by General Kossagovski, who had marched direct from Ssufangtai. The Japanese outposts in the various villages retired on the approach of the Russians and but little resistance was encountered.

The First Siberian Corps, First Division on the right, advanced to the Hun River. The First Division occupied Huanlotaitzu after a preliminary bombardment, and the Ninth Division occupied Toutaitzu by a night assault; neither division encountered serious resistance.

The Eighth Corps drove in the Japanese outposts.

On January 25 the batteries with Mishchenko and Kossagovski bombarded Chitaitzu and Mamikai until night, when the two villages were assaulted and captured by Kossagovski's infantry.

In the First Siberian Corps, the First Division captured Toupao and Shihtsia, while the Ninth Division captured Heikoutai and Erhchiahotzu. The Eighth Corps continued its slow advance to the southward and was joined in the movement by the right of the Tenth Corps.

The Japanese Eighth Division and one Kobi brigade, sent from the Manchurian army reserve, arrived on the night of the 25th at Tatai. Later the Fifth Division from near Yentai and the Second Division and one Kobi brigade from the Japanese First Army were sent to reenforce the Japanese left. Major-General Akiyama, with the First Cavalry Brigade and parts of the divisional cavalry of the Second Army, was near Hsiaopeiho, having a portion of his command on the right bank of the Hun River.

On January 26 Mishchenko with his left column continued his advance as far as Hsiuerhpu, capturing several villages. His right column remained facing the Japanese First Cavalry Brigade. Kossagovski's force remained on the Hun River. One of the Rifle Brigades was placed in the first line on the left of the First Siberian Corps.

At 8 a. m. the Eighth Corps opened artillery fire on Chentanpu; toward midnight the Fourteenth Division assaulted from the west and carried the adjacent villages Baotaitzu and Hsiaoshutzu; the Fifteenth Division carried Peitaitzu, and the Tenth Corps carried Huanchi and Hsinshantun. The Japanese set fire to buildings, opened a heavy infantry and machine-gun fire, and made a series of attacks, driving the Russians from Baotaitzu and Hsiaoshutzu. One brigade of the First Siberian Corps, that was to move past the north side of Tatai and assault Chentanpu from the south, was attacked and checked by the Kobi brigade of the Tatai force moving from Kuchentzu. The Russian brigade then moved north to near Malengtzu, where it was placed in line by the commander of the Eighth Corps.

In the meantime the left wing of the Tatai force had deployed along the Sumapu-Shihtsia line to attack the First Siberian Corps on the Toupao-Heikoutai line, directing the heaviest attack against Toupao. At the same time the right wing attacked on the Laochiao-Sumapu line, but was able to make but little progress.

On January 27 Mishchenko, driving back the opposing Japanese, advanced against and attacked Langtungkou, but was repulsed. Receiving a wound in the knee during this attack, General Mishchenko turned the command of his column over to Major-General Grekov. This attack disclosed the movements of the Japanese Fifth and Second Divisions and one Kobi brigade moving northward toward Heikoutai and Chentanpu.

The Second Division turned west to oppose Mishchenko's command, and succeeded in reaching a line through Chinchawopeng-Chenshao, where it was brought to a stand. The Fifth Division attacked the Liutiaokou-Hsiuchenghotzu line, from which the Russians were threatening the right and rear of the Eighth Division and the left of the main line at Chentanpu.

The right wing of the Japanese Eighth Division gained a little ground to the north, and its Kobi brigade, from Kuchentzu, then advanced, coming on the line between the two wings of the Eighth Division. The extreme left of the Eighth Division, enveloped by Kossagovski's command, suffered severely and was driven back from Shihtsia to Sanchienpao. During

the night of the 27th the Russians continued the attack on the Eighth Division, particularly at Sumapu, which was captured by an assault of the Ninth Division, the Thirty-fourth Regiment entering the village from three sides.

On the other hand the Japanese carried out a succession of strong attacks in the neighborhood of Chentanpu and Heikoutai.

On January 28 the Japanese Fifth Division continued its attack, occupying Liutiaokou at 9.30 a. m. and Hsiuchenghotzu about 3 p. m.

The Japanese Eighth Division and its Kobi brigade continued its attack against Heikoutai and Sumapu. At the latter village a detachment of the Thirty-fourth Regiment, that had captured the village on the preceding night, remained after the adjacent portions of the Russian line had been driven back, was surrounded, and, after a desperate resistance, surrendered about 200 prisoners. The extreme left of the Japanese Eighth Division recaptured Shihtsia, from which it had been driven the preceding day. The Japanese Second Division drove back its opponents of General Grekov's cavalry and Kossagovski's infantry and occupied Hsiuerhpu about 3 p. m., and a little later drove the Russians from and occupied Haerhpu.

The Russian forces concerned state that their retrograde movements of the 28th were taken up in obedience to orders received that day from Manchurian army headquarters.

During the day the Russian Tenth Corps carried Hsiao-taitzu and Yapatai.

The Japanese continued their attack during the night and by 9.30 a. m. on the 29th had recaptured Heikoutai, detachments continuing to and occupying Toutaitzu and Huanlo-taitzu. The Second Division advanced as far as the Hun River, occupying Chitaitzu and Sanchiapu. Troops from Hsiuchenghotzu crossed the Hun and reached a point 1,000 yards south of Changtan. On the 30th the fighting continued on a smaller scale, the Russians continuing to bombard Chentanpu. On the 31st the Japanese attacked and carried Changtanhonan, but were driven out by a counter attack. At noon on February 1 they again carried the village and successfully resisted a counter attack, although the Russians remained in close proximity to the village.

The close of the battle found the Russian troops occupying a line through Changtan and Ssufangtai, west to the Liao River.

The Russians reported a loss of 49 officers and 1,670 men killed, 378 officers and 10,746 men wounded, 25 officers and 1,277 men missing, and the capture of about 300 prisoners. The Japanese reported a loss of 842 killed, 8,014 wounded, and 526 missing, and the capture of 500 prisoners. Both sides suffered severely from frostbite.

The battle was followed by a quarrel between Generals Gripenberg and Kuropatkin, the former claiming that his turning movement was but the part of the general plan in which the Third Army was to follow the development of the turning movement by a vigorous attack on the Japanese center, while the First Army was to join in the general attack as soon as the retrograde movement of the Japanese began, and that the latter general failed to give proper support to the turning movement, successfully begun, by ordering the attack on the Japanese center.

General Kuropatkin claimed that the turning movement failed through lack of proper concert of action between the corps engaged; that a general attack would have resulted only in a waste of ammunition and was rendered inadvisable by the intense cold. General Gripenberg proceeded to St. Petersburg and laid his complaint before the Czar, by whom he is said to have been reprimanded.

BATTLE OF MUKDEN.

(Plate XIII.)

After the battle of Chentanpu the opposing armies remained facing each other without serious engagement until the battle of Mukden. There were, however, almost daily skirmishes of greater or less severity.

At the beginning of the battle the composition and arrangement from right to left of the Russian Manchurian army, commanded by General Kuropatkin, with Lieutenant-General Sakharov as chief of staff, were as follows:

I. Second Army, General Kaulbars; chief of staff, Lieutenant-General Ruzski.

(a) West Detachment, Rennenkampf: The Ural-trans-baikal Cossack Division (Rennenkampf followed by Grekov),

composed of the First Brigade, containing the Fourth and Fifth Ural; the Second Brigade, containing the First Verkhne-Udinsk and First Chita; the Caucasus Brigade, containing the Second Daghestan and Second Terek-Kuban; 2 batteries of horse artillery, and 4 machine guns.

A mixed brigade (Kossagovski), containing the Two hundred and fifteenth and Two hundred and forty-first Regiments drawn from the Fifth Siberian Corps.

(b) The Rifle Corps (Kutnievich): First Division, containing First, Second, Third, and Fourth Regiments, and 3 batteries; Second Division, containing Fifth, Sixth, Seventh, and Eighth Regiments, and 3 batteries; Fifth Division, containing Seventeenth, Eighteenth, Nineteenth, and Twentieth Regiments, and 3 batteries; one-third of the First Orenburg Cossack Regiment from the Tenth Corps.

(c) The Eighth Corps (Milov): Fourteenth Infantry Division (Rusanov), containing Fifty-third to Fifty-sixth Regiments, and the Twenty-ninth Artillery Brigade of 6 batteries; Fifteenth Infantry Division (Ivanov), containing Fifty-seventh to Sixtieth Regiments, and the Forty-first Artillery Brigade of 6 batteries; one-third of the First Orenburg Cossack Regiment from the Tenth Corps; the Twelfth Sapper Battalion.

(d) The Tenth Corps (Tserpitski): Ninth Infantry Division (Herschelmann), containing Thirty-third, Thirty-fifth, and Thirty-sixth Regiments, and the Ninth Artillery Brigade of 6 batteries; Thirty-first Infantry Division (Mau), containing One hundred and twenty-first to One hundred and twenty-fourth Regiments, and the Thirty-first Artillery Brigade of 6 batteries; one-third of the First Orenburg Cossack Regiment; Ninth and Tenth East Siberian Mountain Batteries; Sixth Sapper Battalion.

(e) The First Siberian Corps (Gerngross): First East Siberian Rifle Division (Gerngross), containing the First to Fourth Regiments, and the First East Siberian Artillery Brigade of 4 batteries; Ninth East Siberian Rifle Division (Kondratovich), containing the Thirty-third to Thirty-sixth Regiments, and Ninth East Siberian Artillery Brigade of 4 batteries; Second Brigade, Twenty-third and Twenty-fourth Regiments, of the Sixth East Siberian Rifle Division; the

Primorski Dragoon Regiment; the First East Siberian Sapper Battalion.

II. The Third Army, General Bilderling in temporary command; chief of staff, Lieutenant-General Martson:

(a) The Fifth Siberian Corps (Dembovski): Fifty-fourth Infantry Division (Artamanov), containing Two hundred and thirteenth, Two hundred and fourteenth, and Two hundred and sixteenth Regiments, and the Twenty-eighth Artillery Brigade of 6 batteries; Sixty-first Infantry Division (Podmalniuk), containing Two hundred and forty-second, Two hundred and forty-third, and Two hundred and forty-fourth Regiments, and the Fortieth Artillery Brigade of 6 batteries; Thirty-fourth Regiment from the Tenth Corps; two-thirds the Argunsk Cossack Regiment; Fifth East Siberian Sapper Battalion.

(b) The Seventeenth Corps (Selimanov temporarily): Third Infantry Division (Orlov), containing Ninth to Twelfth Regiments, and the Third Artillery Brigade of 6 batteries; Thirty-fifth Infantry Division (Dobrzzhinski), containing One hundred and thirty-seventh to One hundred and fortieth Regiments, and the Thirty-fifth Artillery Brigade of 6 batteries; the Fifty-first and Fifty-second Dragoon Regiments; Seventeenth Sapper Battalion.

(c) The Sixth Siberian Corps (Sobolev): Fifty-fifth Infantry Division (Laiming), containing Two hundred and seventeenth to Two hundred and twentieth Regiments, and the Tenth Artillery Brigade of 6 batteries; Tenth Orenburg Cossack Regiment; Sixth Sapper Battalion.

III. First Army, General Linevich; chief of staff, Lieutenant-General Kharkevich.

(a) First Corps (Meyendorf): Twenty-second Infantry Division (Kutnievich, with rifle corps), containing Eighty-sixth, Eighty-seventh, and Eighty-eighth Regiments, and Seventh Artillery Brigade of 4 batteries; Thirty-seventh Infantry Division, containing One hundred and forty-fifth, One hundred and forty-seventh, and One hundred and forty-eighth Regiments, and the Forty-third Artillery Brigade of 6 batteries; Second Brigade, Nineteenth and Twentieth Regiments, of the Fifth East Siberian Rifle Division, and 3 Transbaikalian horse batteries; one-half of the Second Verkhne-Udinsk Cossack Regiment; First Sapper Battalion.

(b) Fourth Siberian Corps (Zarubaiev): Second Infantry Division (Levestan), containing Fifth to Eighth Regiments, and First Siberian Artillery Brigade of 4 batteries; Third Infantry Division (Kossovich), containing Ninth to Twelfth Regiments, and 2 batteries of the Twenty-sixth Artillery Brigade; two-thirds of the Seventh Siberian Cossack Regiment; Fourth East Siberian Sapper Battalion.

(c) Second Siberian Corps (Zasulich): Fifth East Siberian Rifle Division (Alexiev, with Eastern Detachment), containing Seventeenth and Eighteenth Regiments and Fifth East Siberian Artillery Brigade of 4 batteries; First Siberian Infantry Division (Morosov), containing First to Fourth Regiments and the Sixth East Siberian Artillery Brigade of 3½ batteries, one-third of the Seventh East Siberian Cossack Regiment and the Fifth and Seventh East Siberian Mountain Batteries; Second East Siberian Sapper Battalion.

(d) Third Siberian Corps (Ivanov, Kashtalinski temporarily): Third East Siberian Rifle Division (Kashtalinski), containing Tenth, Eleventh, and Twelfth Regiments and the Third East Siberian Artillery Brigade of 4 batteries; Two hundred and eighty-fourth Regiment from the Seventy-first Infantry Division; the Siberian Cossack Division (Samsonov), containing Fourth, Fifth, and Eighth Regiments and the Third, Fourth, and Sixth East Siberian Mountain Batteries.

(e) East Detachment (Alexiev, then Rennenkampf): The First Brigade, Twenty-first and Twenty-second Regiments of the Sixth East Siberian Rifle Division (Danilov); Ninth East Siberian Rifle Regiment, Two hundred and eighty-first and Two hundred and eighty-second Regiments of the Seventy-first Infantry Division (Eck); the Transbaikal Cossack Division (Baumgarten), containing the Second Chita, the Second Nerchinsk, the Second Argunsk, the Fourth Transbaikal Horse Battery, 8 machine guns, and 1 Transbaikal Cossack battalion; 4 batteries from the Twenty-sixth Artillery Brigade and 1 battery from the Eleventh East Siberian Artillery Brigade. A flank detachment (Major-General Maslov), containing the Sixth, Seventh, Ninth, and Tenth Siberian Reserve Battalions, 2 squadrons, and 2 guns, was at Hsingking.

A flying detachment (Colonel Madritov), containing 1 Transbaikal Cossack battalion, 5 squadrons drawn from the Amur, Argunsk, and Ussuri Cossack Regiments, the

Eighth East Siberian Mountain Battery of 4 guns, was at Tunghuahsien.

IV. General reserve.

(a) Sixteenth Corps (Topornin): Twenty-fifth Infantry Division (Pnevski), containing Ninety-seventh to One hundredth Regiments and the Twenty-fifth Artillery Brigade of 6 batteries; the First Brigade, One hundred and sixty-first and One hundred and sixty-second Regiments of the Forty-first Division (Birger), and 3 batteries of the Forty-fifth Artillery Brigade; Sixteenth Sapper Battalion.

(b) The Seventy-second Division (Tupan-Mirza-Baranovski) from the Sixth Siberian Corps, containing the Two hundred and eighty-fifth to Two hundred and eighty-eighth Regiments and the Sixth Artillery Brigade of 6 batteries; One hundred and forty-sixth Regiment from the First Corps; one-third of the Amur Cossack Regiment.

The Second Brigade of Birger's division, the Don Cossack Division, the Ussuri Cossack Regiment, and 1 Frontier Guard regiment were sent north shortly before the battle to guard the railway.

The Ninth and Tenth Rifle Regiments arrived during the battle.

There were about 250 heavy guns and 88 machine guns distributed along the line, the heavy guns being concentrated almost entirely near the railway and opposite Chentanpu and Litajentun.

The total force taking part in the early stages of the battle is taken at 370 battalions, 127 squadrons and sotnias, 1,192 field and mountain guns, 250 heavy guns, and 88 machine guns.

The total effective strength is estimated at 375,000.

The composition and order from right to left of the Japanese Manchurian army, commanded by Field Marshal Oyama, with General Kodama as chief of staff, were as follows:

I. Fifth Army, General Kawamura; chief of staff, Major-General Uchiyama.

(a) Eleventh Division (Samejima), composed of Tenth Brigade, containing Twenty-second and Forty-fourth Regiments, and Twenty-second Brigade, containing Twelfth and Forty-third Regiments, Eleventh Cavalry Regiment, and Eleventh Artillery Regiment.

(b) The Second, Fourth, and Ninth Kobi Brigades, containing 14 or 20 battalions.

Total, 26 or 32 battalions, 3 squadrons, and 36 guns.

II. First Army, General Kuroki; chief of staff, Major-General Fujii.

(a) Guards (Asada), composed of the First Brigade, containing the First and Second Regiments; the Second Brigade, containing the Third and Fourth Regiments; the Guards Cavalry Regiment, and Guards Artillery Regiment.

(b) Second Division (Nishishima), composed of the Third Brigade, containing the Fourth and Twenty-ninth Regiments; the Fifteenth Brigade, containing the Sixteenth and Thirtieth Regiments (the Sixteenth Regiment was at army headquarters); the Twelfth Cavalry Regiment, and Twelfth Artillery Regiment.

(c) Twelfth Division (Inouye), composed of the Twelfth Brigade, containing the Fourteenth and Forty-seventh Regiments; the Twenty-third Brigade, containing the Twenty-fourth and Forty-sixth Regiments; the Twelfth Cavalry Regiment, and Twelfth Artillery Regiment.

(d) Three Kobi brigades, with their cavalry and artillery.

(e) Five foot batteries.

Total, 52 battalions, 10 squadrons, and 152 guns.

III. Fourth Army, General Nodzu; chief of staff, Major-General Uyikaza.

(a) Sixth Division (Okubo), composed of the Eleventh Brigade, containing the Thirteenth and Forty-fifth Regiments; the Twenty-fourth Brigade, containing the Twenty-third and Forty-eighth Regiments; the Sixth Cavalry Regiment, and Sixth Artillery Regiment.

(b) Tenth Division (Ando), composed of the Eighth Brigade, containing the Tenth and Fortieth Regiments; the Twentieth Brigade, containing the Twentieth and Thirty-ninth Regiments; the Tenth Cavalry Regiment, and the Tenth Artillery Regiment.

(c) Eleventh and Twelfth Kobi Brigades with their cavalry and artillery.

(d) First Artillery Brigade, containing the Fourteenth and Fifteenth Regiments.

(e) Two regiments of 15 cm. mortars.

Total, 32 or 36 battalions, 7 or 8 squadrons, 180 or 192 guns, 48 mortars.

IV. Second Army, General Oku; chief of staff, Major-General Osako:

(a) Fourth Division (Tsusamoto), composed of the Seventh Brigade, containing the Eighth and Thirty-seventh Regiments; the Nineteenth Brigade, containing the Ninth and Thirty-eighth Regiments; the Fourth Cavalry Regiment, and Fourth Artillery Regiment.

(b) Fifth Division (Kigoshi), composed of the Ninth Brigade, containing the Eleventh and Forty-first Regiments; the Twenty-first Brigade, containing the Twenty-first and Forty-second Regiments; the Fifth Cavalry Regiment, and the Fifth Artillery Regiment.

(c) Eighth Division (Tatsumi), composed of the Fourth Brigade, containing the Fifth and Thirty-first Regiments; the Sixteenth Brigade, containing the Seventeenth and Thirty-second Regiments; the Eighth Cavalry Regiment, Eighth Artillery Regiment, and a battery of Russian guns.

(d) Eighth and Eleventh Kobi Brigades.

(e) First Cavalry Brigade (Akiyama), Thirteenth and Fourteenth Regiments.

(f) Heavy Artillery Brigade (Saisho), containing 6 batteries of four 15 cm. guns each, 4 batteries of six 12 cm. guns each, and 1 battery of Russian quick-fire guns.

(g) Thirteenth Regiment of Field Artillery.

Total, 44 or 48 battalions, 15 squadrons, 212 or 214 guns.

V. Third Army, General Nogi; chief of staff, Major-General Matsunago:

(a) First Division (Yda), composed of the First Brigade, containing the First and Fifteenth Regiments; the Second Brigade, containing the Second and Third Regiments; the First Cavalry Regiment, and First Artillery Regiment.

(b) Seventh Division (Oseho), composed of the Thirteenth Brigade, containing the Twenty-fifth and Twenty-sixth Regiments; the Fourteenth Brigade, containing the Twenty-seventh and Twenty-eighth Regiments; the Seventh Cavalry Regiment, and Seventh Artillery Regiment.

(c) Ninth Division (Oshima II), composed of the Sixth Brigade, containing the Seventh and Thirty-fifth Regiments;

the Eighteenth Brigade, containing the Nineteenth and Thirty-sixth Regiments; the Ninth Cavalry Regiment, and Ninth Artillery Regiment.

(d) Fifteenth Kobi Brigade.

(e) Second Cavalry Brigade (Tamura), Fifteenth and Sixteenth Regiments.

(f) Second Artillery Brigade (Nagata), containing the Sixteenth, Seventeenth, and Eighteenth Regiments.

VI. General reserve:

(a) Third Division (Okubo), composed of the Fifth Brigade, containing the Sixth and Thirty-third Regiments; the Seventeenth Brigade, containing the Eighteenth and Thirty-fourth Regiments; the Third Cavalry Regiment, and Third Artillery Regiment.

(b) The First, Thirteenth, and Fourteenth Kobi Brigades.

Total, 24 or 30 battalions, 3 squadrons, 36 guns.

Each division has a pioneer battalion with the same numerical designation as the division.

The total number of machine guns attached to the various organizations is estimated at 200.

The number of unplaced organizations and of those that arrived during the battle, as well as the number of unorganized reserves at hand to replace losses in battle, are unknown.

The total effective strength is estimated at 325,000^a.

^a The total troops mobilized by Japan during the entire war consisted of the 13 old and 4 new divisions, 12 Kobi brigades, the 2 independent brigades of artillery, the 2 independent brigades of cavalry, and the organizations of heavy field and siege artillery taken from the 21 battalions of coast artillery raised to war strength.

The 4 new divisions, Thirteenth, Fourteenth, Fifteenth, and Sixteenth, were composed mainly of recruits, though containing men from the Kobi, Kokumin, and Hoju (conscript reserves).

The Japanese division has a combatant strength in round numbers of 14,000: ration strength, 20,000.

| | |
|---|-----------|
| In round numbers this gives a total of..... | 485,000 |
| to which must be added of the Hoju, on the lines of communication | 200,000 |
| Sick removed to Japan..... | 281,587 |
| Killed..... | 43,219 |
| Disappeared..... | 5,081 |
| Total..... | 1,014,887 |

The Kobi troops usually formed brigades of 3 regiments of 2 battalions each, 1 battery and 1 squadron.

The Tomioka Detachment consisted of the Eighth Kobi Brigade and the following from the Fourth Division: Three battalions of infantry, 1 section of cavalry, 1 battalion of artillery, and the battery of Russian guns.

The greater part of the Third, Fourth, Fifth, Sixth, and Eighth Cavalry Regiments were attached to the First Cavalry Brigade, forming the Akiyama Detachment.

The main Russian position extended from Ssufangtai through Changtan, Lingshenpu, Shahopu, Fengchiatun, and Pienniulupu to Kaotuling. At Shahopu it crossed to the left bank of the Sha River, recrossing to the right bank at Tashan. There was also an advanced portion of the line south of the Sha, reaching from opposite Fengchiapu to Yanghsintun. Otherwise, from Linshengpu eastward the main position followed the high ground on the right bank of the Sha River.

From the vicinity of Laishengpu a line of prepared positions ran north through Erhtaitzu, Machiapu, Yangshihtun, Niuhsintun, and then northeast across the Hsinmintun highway in the neighborhood of Houtai.

In the rear of the main line was a line of connected works constituting bridgeheads, on the left bank of the Hun, covering the crossings from about 2 miles west of the railway bridge to the vicinity of Yankuantun. On the right bank of the Hun a prepared line extended from Fuling to Fushun.

From the Hun River eastward to Pienniulupu the main Japanese position ran parallel to and practically in contact with the Russian line; both lines passing through the same village of Linshengpu. The left flank was strengthened by preparing for defense the villages, on the right bank of the Hun, extending southward to west of Hsiaopeiho.

About 2 miles east of Pienniulupu the line turned back and ran in an irregular curve to the Pensihu region.

Like the Russians the Japanese had prepared successive positions in rear of the main line.

Just prior to the battle the positions in the Russian army of the various organizations were as follows:

In the Second Army General Rennenkampf's cavalry was to the west of Ssufangtai, Kossagovski's brigade at Ssufangtai, the rifle corps from near Ssufangtai to astride the Hun at Changtan, the Eighth Corps opposite Chentanpu, Tenth

Corps north of Litajentun, and the First Siberian Corps in reserve on the right bank of the Hun, opposite Tawangkampu.

In the Third Army the Fifth Siberian Corps, less one brigade, was near Talientun, the Seventeenth Corps on the railway, and the Fifty-fifth Division, Sixth Siberian Corps, at Shahopu.

In the First Army, the First Corps was at Putilov Hill, the Fourth Siberian Corps was at Erhtaokou, the Second Siberian Corps held the line from Fengchiapu to Kangtolishan, and the Third Siberian Corps held the remainder of the line to Kaotuling.

In the Eastern Detachment, General Eck, with 10½ battalions, 11 sotnias, and 24 guns, was in the neighborhood of Chinghochén; General Liubavin, with 2½ battalions, 4 sotnias, and 6 guns, was near Kaolingtzu; General Maslov, with 4 battalions, 1 sotnia, and 2 guns, was at Hsingking.

General Baumgarten, with 1 battalion, 18 squadrons, 30 guns, and 8 machine guns, connected the Chinghochén Detachment with the left of the Third Siberian Corps.

In the general reserve the Sixteenth Corps was at Peitapu, the Seventy-second Division near Hsiaoquentun, the One hundred and forty-sixth Regiment at Huanshan.

In the Japanese army the positions were as follows:

The Fifth Army was in the Saimachi-Hsienchang region.

In the First Army the Twelfth Division was at Shang-pingtaitzu, the Guards opposite Yanghsintun, the Second Division near Tsaichiatun in reserve.

In the Fourth Army the Tenth Division was opposite Tashan, the Sixth Division was on the Mandarin road, its left extending to southwest of Linshengpu.

In the Second Army the Tomioka Detachment held the line from southwest of Linshengpu to Hsiaotai, the Fourth Division from Hsiaotai to Chentanpu, the Fifth Division from Chentanpu to Malengtzu, the Eighth Division from Malengtzu through Erhchiahotzu to Huanlotaitzu, the Akiyama Detachment at Sanchiatzu, Mamikai, and farther south on the right bank of the Hun.

The Third Army had finished its concentration south of the Taitzu on February 19, and the Ninth Division was at Tashaling, the Seventh Division at Huangniwa, the First Division near Hsiaopeiho, the Second Cavalry Brigade on line with

the left of the Akiyama Detachment, the Second Artillery Brigade and the infantry reserve were near the Seventh Division.

On February 19 the Japanese Fifth Army moved forward in two columns. On the 22d, after skirmishing with small Russian detachments, it occupied the villages on the left bank of the Taitzu River in preparation for an attack on the Russian positions at Chinghochén.

On February 21 the Second Japanese Division marched to Weiningying and sent advance troops to the line Sanchiatzu-Kaochiaputzu, the Russian outposts being on the line Shin-kailing-Peihunling-Houchiahotzu. On the 24th the Third Brigade moved to Kaokuanchai, the opposing Cossacks, under Baumgarten, withdrawing before the advance.

It was reported that false information had been conveyed to Russian headquarters that the Japanese reserves in the Yentai region had moved east.

On February 23 the left column of the Fifth Army attacked the Russian positions near Chinghochén, but was repulsed. The attack was renewed on the 24th and, in conjunction with the occupation of Chingtoukou by the right column, caused the positions to be evacuated toward evening. The Russian troops retired along the roads leading toward Fushun.

On the 24th, after consultation with General Kuropatkin, General Kaulbars recalled the order for his army to attack the next day. General Kuropatkin decided to reenforce his left, and to that end ordered that the First Siberian Corps proceed by forced march to Changsamutun, the attached brigade of the Sixth East Siberian Rifle Division by rail to Fushun, the Second Brigade of the Seventy-second Division to Shihuichen, the One hundred and forty-sixth Regiment to Yingpan. General Rennenkampf was sent to take command of the Chinghochén detachment and all other troops arriving in that region.

General Grekov succeeded Rennenkampf in command of the cavalry on the Russian right. General Grekov's cavalry was divided into two wings. The right (Pavlov) contained 15 sotnias and 12 guns of horse artillery; the left (Eichholz) contained 17 sotnias and 6 guns of horse artillery.

Kossagovski's brigade was withdrawn from the West Detachment to the general reserve of the Second Army, and later joined on the Rifle Corps at Ssufangtai.

On February 25 the Japanese Fifth Army engaged the advance guards of the Chinghochien Detachment, and advanced, the right column to Hsichuanling, the left to Taling.

In the Japanese First Army the Second Division concentrated on the Third Brigade at Kaokuanchai, and, its left connecting with the right of the Twelfth Division and its right being at Yangtianshan, began developing the ground toward Kaotuling. The Twelfth Brigade moved to the Sha River north of Tahopu, and the Fifth Kobi Brigade, Twelfth Division, to Tabekou. A battalion of the Guards made an unsuccessful night attack on Yanghsintun.

On February 26 the columns of the Japanese Fifth Army reached Yulingkou and Shanlunkou, respectively, after slight skirmishing with the Russian rear guards.

In the Japanese First Army the Second Division moved against the line Kaotuling-Hsikouling-Peitalinkouling. The Fifteenth Brigade attacked the positions at Hsikouling and Peitalinkouling, which were held by a force of about three battalions and a portion of the Siberian Cossack Division, but did not make much progress. The Third Brigade advanced and sent a detachment to occupy Wanfuling. The Fifth Kobi Brigade, Twelfth Division, occupied the heights south of Sungshutsuitzu. There was an exchange of artillery fire between the Guards and the opposing Russians south of Fengchiapu.

At night the Russians made small attacks, west of the railway, near Wangchuantzu, Paotzuyen, Yapatai, and Hsiaoshutzu.

On February 27 the two columns of the Japanese Fifth Army were checked at strongly occupied positions near Tita and Wupainiulu, the troops in the first being under Danilov, in the second under Rennenkampf in person.

In the Japanese First Army the Fifteenth Brigade, threatened by the Two hundred and eighty-fourth Regiment, Seventy-first Division, in the hills east of Peitalinkouling and the arrival of a regiment of infantry at Shopu, suspended its intended attack on Kaotuling from the east and took up a defensive position, in which it continued without serious engagement until March 5. The right of the line from Peitalinkouling was bent back facing the east. The Third

Brigade attacked and carried a Russian redoubt east of Wanfuling. The Twelfth Division engaged in artillery fire, while the Guards continued the exchange of artillery fire.

The Fourth Army began to fire against Putilov Hill and Novgorod Hill (just east of Putilov Hill).

In order to divert attention from the movements of the Japanese Third Army, the artillery of the Second, excepting the heavy guns, fired slowly from 8 to 9 a. m. and from noon to 1 p. m. The Fifth Division sent one regiment to Kuchentzu, the Eighth Division sent one to Hsiaotientzu to join the reserve of the Second Army, whose headquarters were now at Koutzuyen.

On this day the Japanese Third Army began its general turning movement. The Ninth Division moved to the line Mamikai-Houfangtaitzu (west of Mamikai), the Seventh Division to Lokonto-Sojushi, the First Division to Mashanchiatzu-Kalima, the artillery brigade and infantry reserve to Wuchiakangtzu, the Second Cavalry Brigade to Kualingteh, on the right bank of the Liao River. The Russian cavalry observed but did not resist this advance.

The First Siberian Corps arrived south of Shihuicheng.

On the night of the 27th a force from the Seventeenth Corps attacked and carried the railway bridge over the Sha River. It was, however, recaptured by the Japanese on the next day.

On February 28 the two columns of the Japanese Fifth Army began a series of determined and costly attacks against the positions of Tita and Wupainiulu. The right column made no progress. The left column carried the heights northeast of Tiupingtai and those northwest of Wupainiulu, and at night made an attack on the main position on the height south of Machuntun, where it was repulsed.

In front of the Japanese First and Fourth Armies there was but little change from the conditions of the preceding day.

In the Japanese Second Army General Akiyama advanced from Sanchiatzu (6 miles east of Mamikai), driving back the opposing cavalry and infantry outposts, and occupied the two villages (Chien and Hou) of Mahulingtzu with the First Cavalry Brigade, and Huanlotaitzu, Toutaitzu, and Hsiaohenwai with the attached troops. The artillery of the Eighth Division assisted this movement by bombarding Toutaitzu and Mahulingtzu.

In the Japanese Third Army the Ninth Division, which was to have occupied the line Ssufangtai-Changchiwopeng, halted at Tsuyutai because of the vigorous defense of Ssufangtai. The Seventh Division advanced to Tahoangchipu, the First Division to Chentzukou, the Second Cavalry Brigade to Yanglangchiapu, the artillery brigade and infantry reserve to Tatzuying.

General Kuropatkin sent the Twenty-fifth Division, Sixteenth Corps, toward Shalingpu and ordered Birger's brigade to march toward Hsinmintun so as to arrive at Kuliuhochen the next day.

On March 1 the Fifth Army made but little progress in the attacks on the positions at Tita and south of Machuntun.

In the Japanese First Army the Third Brigade, after hard fighting, carried two more redoubts on the heights north of Wanfuling. The Twelfth Brigade attacked the height northeast of Tungkou and was repulsed.

The Guards made a slight advance in two parts of their line near to and below Pienniulupu, and, in the early morning completed a night attack by which they captured a Russian trench on the heights north of Minchiayu, repulsing the Russian counter attacks.

The Fourth Army continued its artillery fire, to which the Russians energetically replied.

In the Japanese Second Army the artillery of the Fifth Division opened fire against Lichiauwopeng and Changtanho-nan at 7.30 a. m., and the division advanced an hour later. The artillery of the Fourth Division, from near Yapatai, opened fire on Peitaitzu, Huanchi, and Hsinshantun, while Hayashi's brigade, Fourth Division, advancing past the west side of Chentanpu attacked a redoubt about 300 yards west of Peitaitzu. The Eighth Division crossed its main force to the right bank of the Hun and deployed against the Changtan-Nienyupao line, the artillery coming into action from near Toutaitzu. General Akiyama arrived at Toutaitzu with the the main portion of his command and opened artillery fire against Nienyupao at 9 a. m. The attack was carried on during the day and into the night, but the Japanese failed to carry any portion of the Russian line.

In the Japanese Third Army the Ninth Division, which was to attack Ssufangtai as soon as the Seventh and First Divi-

sions had reached Suchiaan, opened fire from the southeast at noon. The artillery brigade advanced to Suchiaan, fired on and drove back the opposing cavalry. A part of the brigade then took position at Tapingchuang and opened fire on Ssufangtai. In spite of the cross fire thus obtained the Russians held Ssufangtai until night and then retired to the northeast. The Ninth Division made a night attack but found the village deserted.

By night the Seventh Division had reached Huoshihkangtzu, the First Division Hichiauwotzu (5 miles northwest of Huoshihkangtzu), the cavalry brigade Tamingtun, the artillery brigade and infantry reserve Yuchiatai (3 miles northwest of Suchiaan).

On the evening of this day the First Cavalry Brigade was detached from the Second Army and sent to join the Third Army, thus giving the latter a full division of cavalry. General Kuropatkin sent General Shatilov with a composite division, drawn from the Tenth Corps, to reenforce the Twenty-fifth Division, Sixteenth Corps, near Shalingpu. The First Siberian Corps, now with the First Army, was ordered to proceed to Peitapu, and then to near Mukden as part of the general reserve.

To replace the Sixteenth Corps (Birger's brigade and the Twenty-fifth Division) in the general reserve the Eighth Corps was ordered withdrawn, the positions vacated by its withdrawal to be occupied by troops of the Rifle Corps. The withdrawal from Ssufangtai and vicinity of Kossagovski's brigade and portions of the rifle corps on the night of March 1, disarranged this plan and greatly increased the difficulties of the Eighth Corps on the next day.

On March 2 there was no material change in the conditions in front of the Fifth Army.

The First Siberian Corps reached Shahotzu in its return to the west. One-half of the Seventy-second Division remained in the front line north of Kaotuling, the other half was placed in reserve at Shihuichen.

In the Japanese First Army the Third Brigade captured 2 redoubts east of the Impan-Kaotuling road, but was repulsed with heavy loss in an assault on the third redoubt. The Twelfth Division continued the attack on the heights northeast of Tungkou and north of Chinghichai, captured the

first position and failed in the attack on the second. The Guards began operations against the Russian position south of the Sha River in the vicinity of Fengchiapu.

The Japanese Fourth Army began a series of small attacks to prevent the opposing forces being withdrawn to reenforce other portions of the line. The most important of these attacks was against Putilov Hill, from the vicinity of which the Russians made an unsuccessful night attack.

In the Japanese Second Army, Hayashi's brigade stormed the redoubt west of Peitaitzu, was driven out, made a second assault, which was repulsed, and finally carried the redoubt at 4.30 a. m., after very severe fighting.

The Fifth Division, which had suffered severely on the preceding day, observed the beginning of the Russian withdrawal, attacked the rear guards at Changtanhonan and Lichiauwopeng, securing possession at 5.30 and 7.30 a. m., respectively, and followed the Russians as far as Chiutsai-hotzu.

The main body of the Eighth Division, finding Changtan and Nienyupao deserted, advanced through the towns and followed up the bank of the Hun. The remainder of the division crossed the Hun and joined the main body. The Fifth, the Eighth, and the Kobi regiments of cavalry, from the Akiyama Detachment, were attached to the Eighth Division, which advanced to Hochuangtzu and by sunset occupied Wanchutai and Hsiaoliputzu.

The troops of the Fourth Division that were in reserve near Yapatai, observing the evacuation of Huanchi, attacked and carried Hsinshantun at 2.30 p. m.; Hayashi's brigade, after having captured the redoubt west of Peitaitzu, attacked Kuchiatzu, which was carried about 6 p. m. The Thirteenth Regiment of Artillery assisted by bombarding from a position taken up west of Peitaitzu. From the same position it assisted a regiment and battery of the Fifth Division in carrying Shoukuanpu at 5 p. m. After taking Kuchiatzu Hayashi's brigade carried Erhtaitzu at 7 p. m. The troops of the Fourth Division that were occupying the line near Litajentun advanced against and carried Fuchiachuang at midnight.

In the Japanese Third Army the Ninth Division advanced to Hsiaotaitzu. A mixed division, containing the Two hundred and fifteenth, Two hundred and forty-first, Fifty-fourth,

and Sixtieth Regiments, that had been formed for the purpose of an advance via Shalingpu, was placed under command of Major-General Golembatovski, a brigade commander in the Fifteenth Division, moved southeast from Shuangshutun and drove the Japanese back from Peihosa and Sathaisa, thus greatly aiding the Russian Eighth Corps in its retreat from territory in which it was being attacked on three sides, and allowing it to reach the designated line, Tontaitzu-Hsintaitzu.

The Japanese Seventh and First Divisions reached their destinations, the vicinity of Shalingpu and Lamuho, respectively, about noon without having met resistance. From these positions the Seventh Division was ordered to the line Tachuingsuitzu-Tatzupu, the First Division to the line Changchiafang-Hsiniulu. The Second Cavalry Brigade reached Chinchiat'ai, the artillery brigade and infantry reserve reached Shalingpu by 6 p. m., the First Cavalry Brigade arrived and was posted at Panchiat'ai to close the gap between the Ninth and Seventh Divisions.

Lieutenant-General Topornin, with the Twenty-fifth Russian Division (Lieutenant-General Pnevski) and a mixed division from the Tenth Corps (Major-General Shatilov), attacked Shalingpu about 5 p. m. The cross fire from the Seventh and First Divisions repulsed the attack. The Russians, though losing heavily, continued to hold the villages in their vicinity, repulsing the attacks of the Japanese.

On account of the progress of the Japanese following the Rifle Corps and Kossagovski's brigade on the right bank of the Hun, a slight change was made in the Russian plan of withdrawal of the Second Army, which was ordered to occupy the line Tusampu, Changsupu, Sualpu, with reserve at Suhupu and advance troops at Tawankampu. The Tenth Corps was to march on Sualpu. In the Eighth Corps the Fifteenth Division was to act as rear guard of the Second Army and withdraw along the left bank of the Hun. The mixed division under General Golembatovski was to act as rear guard on the right bank of the Hun, keeping abreast of the Fifteenth Division. A mixed division of three regiments from the Seventeenth Corps was sent under command of Major-General De Witt to strengthen the Russian force acting against Shalingpu. A detachment of 8½ battalions and 24 guns from the Rifle Corps was sent, under Major-General

Churin, during the night of March 2 to reenforce the troops in this same region, where General Kaulbars took command in person about 9 a. m. on the 3d, leaving General Launitz in command in the Suhupu region.

On March 3 the Japanese Fifth Army was still held in check by the Russians.

In the First Army the Twelfth Division continued its attack, but was unable to make any material progress. The Second Guards Brigade crossed the Sha River on the night of the 2d-3d and seized the heights north of Housung-muputzu and Tangchiatun. It then attacked the main position unsuccessfully, but maintained its own position on the right bank of the Sha River and repulsed the Russian attacks that were made on the night of the 3d.

The Russians made an attack from in front of Fengchiapu, but were repulsed.

There was no change in the conditions in front of the Fourth Army.

In the Japanese Second Army a force from the Tomioka Detachment made an unsuccessful attack on Tamuchinyen. The right of the Fourth Division, strengthened by the Thirty-fourth Infantry from the Third Division, advanced to Peilintai; the left of the Fourth Division moved forward from East Hsiaohantai. By night the division formed a line from Sanchiatzu, through Hsiaokao, to Hoanchi. The Fifth Division advanced from Shoukuanpu to a line from west of Inerhpu to Suliandampu, skirmishing with the Russian rear guard at Tontaitzu. The Eighth Division marched up both banks of the Hun, from Wanchutai and Hsiaoliputzu, the right column recrossing the river below Litapu to Waichiapu.

In the Third Army there was no change of position by the Seventh and First Divisions. The Ninth Division, relieved by the Eighth Division, Second Army, moved to Linchiatai.

General Topornin, with his force of 32 battalions, again attacked Shalingpu. The Japanese First Artillery Brigade and infantry reserve had now deployed near this village, adding their fire to that of the Seventh and First Divisions. The Russians lost heavily, particularly in the right column, Twenty-fifth Division, under Lieutenant-General Pnevski. General Kaulbars arrived about 9 a. m. and directed the

withdrawal of the attacking force. The troops of the Twenty-fifth Division were halted near Yukuantun, those of the Tenth Corps, near Huankutien. De Witt's detachment, 11½ battalions, was occupying the line Makuantzu-Houtai.

On the extreme left the Japanese Second Cavalry Brigade came into contact near Tafangshen with Birger's brigade, retiring from the Hsinmintun region, supported by about 25 squadrons of Russian cavalry. Two battalions were sent from the First Division to reenforce the Second Cavalry Brigade which, concluding that it was confronted by an offensive operation, took up a defensive position. In the evening the Russians withdrew, no severe fighting having occurred. Birger proceeded to Hushihtai station with his main body; a detachment separated from the main body and reached the Mukden station.

The first Siberian Corps arrived at Mukden station in the afternoon.

Because of the disaster at Shalingpu the Russian plan was still further modified. Twenty-four battalions of the Second Army were to be left astride the Hun River in the Machiapu position, with a rear guard at Suhupu. The remainder of the Second Army was to be concentrated, on the fortified line west of Mukden, in readiness to take the offensive against the Japanese Third Army. The right of the Third Army was to be withdrawn so as to run from Linshengpu through Laishengpu.

To carry out this plan, General Launitz ordered parts of the Tenth, Eighth, and Rifle Corps to march in two columns through Machiapu to Shatotzu, the trains crossing to the right bank of the Hun by way of the railway bridge. The Fifteenth Division, General Ivanov, on the left bank and Golembatovski's detachment on the right bank of the Hun, were to remain in position. General Tolmachev, commanding a portion of General Grekov's cavalry was to protect the right flank of this line.

The resulting movements were carried on during the night and were still in progress on the 4th.

General Golembatovski apparently found himself unable to hold his portion of the line on the 3d and withdrew prematurely. General Ivanov, because of this withdrawal,

decided it was not practicable to occupy Changsupu, but fell back at once to Tatai without occupying Suhupu. The latter village was occupied by a Japanese party about 11 p. m., and General Ivanov then extended his right to the Hun River at Erhtaitzu, in order to bar the further approach of the Japanese against the right flank of the Russian Third Army.

On March 4 the Japanese Fifth Army, finding itself unable to advance, desisted from attacking, though remaining in contact with its opponents. The left of the right column was vigorously attacked by the Russians who were reenforced by the arrival of the Eighty-fifth Regiment.

In the Japanese First Army the Fifteenth Brigade left the Thirty-ninth Kobi Regiment between Hsikouling and Peitalinkouling and concentrated the remaining troops near Houchiayu. The Twelfth Brigade was drawn back to north of Tabekou and concentrated on the remainder of the Twelfth Division, which then attacked and carried the first Russian position north of Pienniulupu. The Japanese also carried a trench near Housungmuputzu, thus improving the situation of their troops in that vicinity.

There was no change in the conditions in front of the Fourth Army, to which the Tomioka Detachment and the Fourth Division were transferred at noon. The Fourth Division captured Hsiaosholuitzu and Laishengpu, repulsing three attempts to recapture the latter. At the time of the capture of Hsiaosholuitzu the left of the Tomioka Detachment moved forward and captured Tamuchinyen. The opposing Fifth Siberian Corps withdrew to the line Suchiatun-Peitaitzu-Pechentzu.

The right of the Fifth Division, after repulsing an attack, advanced and occupied Inerhpu. The remainder of the division assembled at Changsupu. The artillery of the division, from between Suhupu and Suliandampu, assisted the advance of the Eighth Division on the opposite bank of the Hun. Later, the Fifth Division, leaving one detachment at Suhupu and one at Changsupu, crossed the Hun and proceeded against Hsiaoshatotzu.

The Eighth Division occupied Hiatzu, Hsiaoyushupu, and Tayushupu, and the advance troops took up a position from Yulinpu to Nienkuantun in which they were subjected to

infantry and artillery fire from Yangshihtun, Hsiaoshatotzu, and Machiapu.

The first line of the Fifth Division then advanced against the portion of the line between the old railway bridge and Hsiaoshatotzu, being assisted by the fire of the Fifth Artillery Regiment from east of Tayushupu. The attack suffered severely and made no progress.

The Third Division, in the Japanese Manchurian army reserve, was added to the Second Army and by sunset had reached Tuinandou and Hsiao-chingsuitzu. The headquarters of the Second Army moved to Waichiapu, its general reserve to Suliandampu.

In the Japanese Third Army the Ninth Division was directed to march on Mukden station, the Seventh Division on the north Tombs, and the First Division on Chengitun. The Seventh Division reached Fentai and sent one regiment to attack Likuanpu, but this attack was not pressed. The First Division reached Tashihchiao without opposition. The First Cavalry Brigade joined the Second, and the Cavalry Division, accompanied by 2 batteries and 6 machine guns, reached Chienshentaitzu.

On March 5 the Japanese Fifteenth Brigade, attacking from the direction of Menyaputzu, drove back the troops of the Two hundred and eighty-fourth Regiment and occupied a line through Tungkouling.

In the Japanese Fourth Army the Tenth Division occupied Liuchiangtun and advanced its line slightly in front of Shahopu. The Tomioka Detachment and the Fourth Division advanced to the lines west Hanchengtzu, Wenshinpu, Tatzuin, and Hsiao-suchiapu, Tasuchiapu, Pechentzu, respectively. This advance was facilitated by the shifting of positions in the Seventeenth Corps (weakened by the mixed division that had been drawn from it) by which the Third Division stood at right angles to the Fifth Siberian Corps, along the railway facing west while the Thirty-fifth Division still fronted south. The commander of the Seventeenth Corps, in order to close the gap that had resulted from bending back the Fifth Siberian Corps on the fourth directed, at 9 p. m. of that day, that his corps should swing back to the railway, facing west. About 11 p. m. he issued a second order to hold a position, facing south, to the rear of the old

line. During the night the Third Division had carried out the first, and the Thirty-fifth Division had carried out the second order.

The result of the day's fighting was that in the Russian Third Army the Fifth Siberian Corps occupied a line from Pechentzu to Suchiatun; the Seventeenth Corps, from Suchiatun along the railway to Hanchengtzu and thence to Kuantun; the Sixth Siberian Corps extended from Kuantun in the shape of a bastion front facing Shanlantzu; the reserve of about 10 battalions was near Shanhotun. At this time the Third Army contained about 64 battalions, 208 guns, and 18 mortars. Near Erhtaitzu was a detachment, Colonel Kuznetsov, belonging to the Second Army, but transferred on this day to the Third Army.

The formation of the Russian troops west of Mukden at this period, and the Russian plan are shown in the following order of General Kaulbars, commanding the Second Russian Army:

MUKDEN STATION,
1905, *March 5—12.45 a. m.*

Information has been received that in the neighborhood of the village of Sanpuho a Japanese column has appeared, consisting of cavalry and infantry. The object of the army is to drive the enemy westward to beyond the line of the old railway (as far as Machiapu, East Kuchiatzu, Hsiniulu), advancing so as to envelop the enemy's flank.

Continue scouting. Examine the entire region between the railway and the road to Hsinmintun.

Aim: To determine the direction of enemy's march and the number of his troops. Other cavalry to continue its work in the rear and on the flanks of the enemy.

To assemble at 8 a. m. on the line Hsiao-chiatun-Houtai. To press the enemy's left flank, enveloping and driving it to the west.

For that purpose:

A. Cavalry.

Colonel Vovonov; Primorski Dragoon Regiment.

B. Infantry.

1. Right column: General Gerngross; 1st Siberian Corps; mixed division, 17th Corps; mixed division, 10th Corps; the 147th Samara Regiment (49 battalions, 115 guns).

2. Center column: General Toppin; 25th Infantry Division (16 battalions, 48 guns). To remain in position until the influence of the enveloping action of the right column becomes evident, and until the enemy withdraws behind the line Jahen-Yuchiattun; then advance west in the direction Changshihtun-Makuantzu.
3. Left column: General Tserpitski; five infantry regiments (56th, 121st, 122d, 215th, and 33d); 5th, 7th, 8th Rifle Regiments, 5th Rifle Brigade (34 battalions, 72 field, 17 old pattern guns, 12 mortars). To firmly hold positions occupied; to advance simultaneously with the 25th Division, pivoting on Machiapu. Aim: To occupy the line of the old railway from the General Dembovski's positions to the village of Kuchiatzu, inclusive; prepare the line for firm defense.
4. General reserve: General Hanefeld; 55th and 241st Regiments (8 battalions). To take position near the village of Lukuantun.
5. Region for assembling trains: Of the right and center columns, north of Mukden between the railway and the Mandarin road; of the left column, between the railway and Mukden north of the Hsinmintun road.
6. Hospitals and parks: As ordered by commanders of columns.
7. Substitutes in case of emergency: General Ruzski, General von der Launitz.
8. Reports to be sent to village Houtai (village with a tower) on the Hsinmintun road.

In the Japanese Second Army at 4 a. m. the Fifth Division resumed its attack toward Hsiaoshattotzu. Its advance was covered by the fire of the battalion of field and heavy guns, posted north of Tsuichiapu, and the Fifth Artillery Regiment, posted southeast of Tayushupu, and reached the old railway embankment. Here it came under the infantry fire of the Russians holding Machiapu and was repulsed. The right of the Eighth Division, attacking with three battalions from the direction of Yulinpu, joined on the left of the Fifth Division. The main force of the Eighth Division attacked Yangshihtun. Both attacks failed, as did a third attack made about 2 p. m. The Third Division moved from Tachingtsuitzu to relieve the Ninth Division and during the night occupied Changshihtun and Suimintun.

The Ninth Division then withdrew to take up a position between the Seventh and First Divisions. Otherwise there was no important movement in the Japanese Third Army.

During the afternoon the First Siberian Corps, less 8 bat-

talions of the Ninth Division which had been sent to Shatotzu to aid the troops holding the line at and near Machiapu, had advanced with but little opposition to the line Taochiaotun, Tachiatzu-Tafanhsintun.

On March 6 the Japanese Fifteenth Brigade made a slight advance beyond Tungkouling. Otherwise conditions in front of the Japanese First Army did not change materially. The Russians made an unsuccessful night attack on the Japanese near Tangchiatun.

The Fourth Army continued its operations west of the Mandarin road, attacking Shahopu, east Hanchenztsu, Suchiatun, Peitaitzu and Erhtaitzu.

The offensive movement begun by the Russian Second Army on the preceding day was to be continued according to the following order issued by General Kaulbars shortly before midnight of the 5th-6th:

The enemy is concentrating his forces (three divisions) in the angle between the Hun and the old railway line. Farther to the north toward the Hsinmintun road have been seen infantry and artillery, numbers not ascertained. Northeast of the Hsinmintun road small detachments of cavalry are in front of our positions.

To-morrow the army will continue the movement to occupy the line Shalingpu-Tehsiangyintzu-Lianchiapu, including the sand hills between Linminhuantzu and Tehsiangyintzu, observing also the action of the enemy to the north and northwest.

To that end: 1. *Colonel Zapolski's detachment* is to march from Santaitzu at daybreak, go to Tashihchiao, and bar the Hsinmintun road.

2. *General Gerngross's detachment*: (a) *The mixed division of the Seventeenth Corps* (De Witt, from near Tafanhsintun), two regiments to go to Tashihchiao and remain until the arrival of Colonel Zapolski's detachment, then to move on Jahen, Yangchiahung, Chienchiahung, Lanshantai; three regiments to go to Hohuntai, Yuchiatun, Houmintun, Chienmintun, Koulintai. (b) *The First Siberian Corps*, to march at daybreak: Nine battalions from Chinsotun to move on Likuanpu, Changshihtun; nine battalions from Sanchiafin to move on Yukuantun, Nienkuantun; the sand hills to be fortified when taken.

3. *General Tserpitski's detachment* to hold fast the position (between Machiapu and Yangshihtun) occupied and support by fire the detachment of General Gerngross; simultaneously with attack of latter detachment on Changshihtun, Nienkuantun, occupy Yulinpu and later the old railway line.

4. *General Herschmann's detachment* to hold fast the position (on both banks of Hun at Machiapu) occupied.

5. *General Topornin, general reserve* (Twenty-fifth Infantry Division and Second Brigade of the Thirty-first Infantry Division), to remain in positions (from Yangshihtun to Niuhsintun) occupied and aid by fire the advance of the First Siberian Corps.

6. During the advance all four columns to aid each other with fire and bayonet, striving to take the enemy in flank.

7. *General Birger's detachment* to remain near Hushihtai station and protect Mukden from the north.

8. Trains of second and third categories to take position east of the railway.

9. Reserve of flying artillery parks to take position at Lanyutun.

10. Reports to be sent to Houtai.

11. In case of emergency, next in command General Ruzski and General von der Launitz.

The advance of General Tserpitski's portion of the line (from Machiapu to Yangshihtun) was anticipated by the renewal and intensification of the attack by the Japanese Fifth and Eighth Divisions on Machiapu, Hsiaoshatotzu, and Yangshihtun. As on the preceding day, the Russian infantry in Machiapu was able to bring flank and even reverse fire on that portion of the Japanese line that succeeded in reaching the old railway embankment. The greater part of the fire of the Japanese battalion of field and heavy guns north of Tsuichiapu and of the Fifth Artillery Regiment of mountain guns, southeast of Tayushupu, was concentrated on Machiapu and Hsiaoshatotzu, and the infantry of the Fifth Division made a determined but unsuccessful assault. Toward evening the Twenty-first Brigade, Fifth Division, now on the left bank of the Hun, was detached and ordered to join the Third Division.

The Eighth Division attacked as on the preceding day. Its heavy guns took position north of Hsiaoyushupu, its field guns crossed the railway embankment and opened fire against Yangshihtun. The right of the division, at Yulinpu, made an unsuccessful assault, losing heavily. It was assisted by the Thirteenth Artillery Regiment, which had rejoined the Eighth from the Fourth Division and had taken position east of Tsaochiatun. The left of the Eighth Division also made an unsuccessful assault.

The Third Division sent two battalions to a line about 800 yards east of Changshihtun, the divisional artillery to north-east of Changshihtun and the Twenty-first Brigade to Likuanpu. Its attack was not pressed.

The Second Army headquarters were at Hsifanpu, the general reserve of two battalions at Tsaochiatun, where it was joined by one battalion of the Thirty-fourth Regiment, Third Division, returning from duty with the Fourth Division.

General Gerngross moved against Tashihchiao as ordered. The time was opportune, for there was a gap on the left of the Japanese Seventh Division at Tashihchiao, caused by the march north to Pinglupu-Koushihyang of the First Division, which had not been closed by the expected arrival of the Ninth Division. By 11 a. m. the advance of this attack had penetrated nearly to Tashihchiao. The right flank guard of the advance, Colonel Lesh, carried Chuanwanchiao about 10 a. m., the Japanese detachment retreating to Liutsiahuan. This village was then unsuccessfully attacked by Colonel Lesh assisted by other troops from General De Witt's column. The Japanese Third Army reserves, from Mashanchiatzu, and a battalion from the left of the Seventh Division succeeded in holding the attack in check until the Ninth Division began to arrive. About 3 p. m. the attack was repulsed after losing heavily, and General Gerngross ordered a suspension of the forward movement, thus concluding the last important offensive movement undertaken by the Russian army, and presumably causing the decision to withdraw from the Sha to the Hun River.

The Japanese Cavalry Division was checked by the opposing cavalry in the vicinity of Erhtaitzu.

The Second Brigade of the Thirty-first Division, Tenth Corps, in the reserve of General Kaulbar's army was brought, toward evening, from the left bank of the Hun to Lukuantun in response to reports sent by General Tserpitski regarding the severe attacks made on his line between Machiapu and Yangshihtun.

A detachment of 4 battalions, 8 guns, and 1 scout company, under Colonel Tsikovich, was sent by General Kuropatkin from his reserves to reconnoiter northwest through Santaitzu. The Tenth Rifle Regiment, which had arrived by rail, was added, and the detachment, under command of Colonel Missevich, of the Tenth Regiment, was first ordered to hold the line Tachiatun-Santaitzu-Yuanchentun and then sent about 4 p. m. to Makuantzu for the defense of the Niuhsintun-Makuantzu district.

On March 7 the left of the Japanese Fifth Army made a slight advance, establishing communication on the heights north of Tuchiaputzu with the Fifteenth Brigade, which had been brought to a halt after a slight advance.

The Russians made an attack against the heights north of Tangchiatun and one against the Tenth Division, both of which were unsuccessful.

East Hanchengtzu was carried, about 11 a. m., by the Sixth Division and the Tomioka Detachment after an engagement that had continued from the evening of the preceding day. In carrying out this attack the Sixth Division concentrated on its left, and the resulting gap on its right was closed by inserting the Third Reserve Brigade opposite Shahopu.

The attempt to carry the attack on east Hanchengtzu to Kaolitun was repulsed. The Fourth Division attacked Hsiaokushinpu, but did not make any headway until the next day.

In the Japanese Second Army the Fifth Division remained stationary. The Eighth Division made a night attack, the right advancing from southeast of Yulinpu, the left advancing from north of Nienkuantun against Yangshihtun. The attack failed and the troops taking part retired to their original positions. The Third Division made an attack before dawn, in which the Fifth Brigade, General Nambo, carried Yukuantun, held by troops of the Twenty-fifth Division. Desperate fighting for the possession of this village continued throughout the day, and at night the remnants of the Fifth Brigade, about 1,000 men, many of whom were wounded, withdrew to their old line. The desperate fighting caused reinforcements aggregating 4 battalions and 2 heavy batteries to be sent to the Japanese Third Division and 16 battalions to the opposing Russians. In Japanese accounts the scene of this fighting is frequently placed at Likuanpu. The Russian losses in recapturing the village were 141 officers and 5,343 men killed and wounded.

The Japanese Third Army was now charged with breaking through the defense between Chengitun and the north Tombs. Two and one-half brigades of reserves from the Manchurian army headquarters were added and assigned to the different divisions according to emergency. The Seventh Division was to march on the north Tombs, the Ninth Division on Yunsontun, and the First Division on Chengitun.

The Seventh Division carried Chuanwanchiao, held by Colonel Lesh, and attacked Tafanhsintun, carrying the latter village at nightfall. The Ninth Division, assisted

by the Second Artillery Brigade, after an engagement lasting all day, carried Chaohuatun, held by Colonel Zapolski with the Ninth Rifle Regiment and the newly arrived One hundred and forty-seventh Infantry Regiment, with heavy losses on both sides. The detachments of Colonels Lesh and Zapolski were both reenforced by troops from the First Siberian Corps. Colonel Zapolski's detachment halted at Tachiatzu. The Japanese First Division reached the line Siutaitzu-Chengitun, from which its artillery damaged the railway slightly.

The Japanese Cavalry Division was on the line Tashintun-Lichiaputzu after failing in an effort to cut the railway at Hushihtai.

At 1 p. m. on the 7th General Kuropatkin issued an order for withdrawal in which it was directed that:

1. The *Third Army* to occupy the fortifications of the tête de pont from the Hun to redoubt No. 5 east of Muchiapu, inclusive, detailing 16 battalions to the strategic reserve at Mukden.

2. The *First Army* to occupy the Fuling and Fushun positions, its right on redoubt No. 5. The detachments of Generals Danilov and Maslov to cover the roads leading from the line Fushun-Yingpan to Tiehling. The *First Army* to detail 24 battalions to the strategic reserve at Mukden.

3. The *Second Army* and corps temporarily attached to same to cover this movement, holding back the enemy on the line of the villages Yuanchentun-Chaohuatun-Yukuantun-Yangshihtun-Shatotzu, holding enemy back on the right of this line to the utmost limit.

* * * * *

5. The troops of the *Third* and *First Armies* to withdraw their main forces during the night of the 7th-8th quite secretly leaving on their positions strong rear guards which are to retreat only when pressed by the enemy, holding him back as long as possible.

Early on the 8th Colonel Borisov was sent to Tsuerhtun with the 5½ battalions and 8 guns belonging to the Fourth Siberian Corps and held in reserve by General Kuropatkin, thus forming a nucleus for the detachment formed and placed under command of General Milov. General Herschelmann and his 16 battalions were taken from General Kaulbars, ordered to remain in reserve at the disposition of General Kuropatkin, and then ordered to Tsuerhtun to report to General Milov. To this detachment under General Milov were to be added the 40 battalions and 14 batteries detached from the *First Army* and the 16 battalions detached from the *Third Army*. It was to clear and hold the ground north

and west from Tsuerhtun so as to protect the railway and be ready for an energetic offensive that was to be executed on March 9.

General Milov was available for the command of this detachment because of his own corps, the Eighth, having since March 3 been distributed among the various detachments that had been formed.

By morning of March 8 the withdrawal of the Russian First Army was well under way. The withdrawal was announced by the flames from burning supplies, and the opposing Japanese took up the pursuit. The prepared roads leading from the positions back to the Hun facilitated the withdrawal, which was accomplished with but few rear-guard actions and slight losses in personnel. By daylight the Russian Second Army, which lost heavily in matériel, had occupied its new positions with the 46 battalions remaining after detaching the 16 battalions to the strategic reserve.

The Japanese Fourth Army, except the Tomioka Detachment and the Fourth Division, which were transferred back to the Second Army, moved forward in pursuit. The detachment was ordered to hold the line from Suchiatun to Erhtaitzu, the Fourth Division to cross to the right bank of the Hun. The troops, however, were more or less disorganized by the fighting of the preceding day and but one battalion, of the Thirty-seventh Infantry, had joined the Second Army reserve at sunset.

The Russians had withdrawn all but a small rear guard from Machiapu during the night of the 7th. On the morning of March 8 the right of the Japanese Fifth Division, on the left bank of the Hun, advanced through Erhtaitzu and, by evening, occupied Machiapu. The left of the Fifth Division, which had drawn back behind the old railway embankment during the night, advanced to west of Hsiaoshatotzu, which was still held in force. This advance was assisted by the mountain guns of the division from a position near the railway embankment.

The Japanese Third Division failed to make any progress, its action consisting principally of artillery fire.

In the Japanese Third Army the Ninth Division had a village at the junction of the railway and the Santaitzu road

as objective, the Seventh Division had Kinchiauatzu, the First Division had Yunsontun.

One brigade of the Seventh Division attacked Hsiaofanhsintun and was repulsed with heavy loss. The other brigade and the attached reserves made several unsuccessful attacks on Hsiaochiatun. The Ninth Division captured Tachiatzu, about 1 p. m., after severe fighting in which the Russian commander, Colonel Zapolski, was killed. The First Division attacked the Yuanchentun-Santaitzu line but, after hard fighting, was brought to a stand about 600 yards from the opposing line.

The opposing cavalry divisions engaged each other, both mounted and dismounted, in the vicinity of Houshintun.

On March 9 the movements of both armies were influenced by a violent gale and accompanying dust storm.

On the south front the general line of separation was the Hun River, with the exception of a small area in front of the Guards at Kiusan and of the bridge heads, covering the crossings south of Mukden, still held by troops from the Russian Third Army.

From Fushun northeast toward Yingpan were the detachments of Rennenkampf, Danilov and Maslov; from Fushun west to Tayingtín were troops of the Third and Second Siberian Corps; from Kiusan west through Fuling to redoubt No. 5, at Muchiapu, were troops of the Fourth Siberian and First Army Corps; a total of 106 battalions after detaching 40 battalions to the strategic reserve.

The right column of the Japanese Fifth Army pursued in the direction of Yingpan. The advance guard of the left column reached Fushun but withdrew because of the strength with which the prepared positions north of the Fushun-Kapukai line were occupied.

In the Japanese First Army the right column of the Twelfth Division (Twenty-third Brigade) was on the left bank of the Hun, opposite Holungtien. The left column (Twelfth Brigade) occupied the heights northeast of Tayingtín and west of Hsiaotai with one regiment, having penetrated the gap in the line between Kiusan and Tayingtín. The Guards reached the vicinity of Huanchiakou, sending the cavalry regiment and one battalion to Hushinpu. The Guards Reserve Brigade was at Tayingtín. The Second

Division arrived at the Hun and occupied the bridges at Fushun and Kapukai.

In the Japanese Fourth Army the reserve reached Yankuantun, the Tenth Division reached Wandaintun. The Sixth Division, leaving a detachment at Wanshitun, moved to in front of the bridge heads in the vicinity of Changhutun.

In the Japanese Second Army the Tomioka Detachment extended to the left so as to cover the ground held by the Fourth Division, which concentrated at Machiapu and sent one brigade across the Hun to attack toward Tapu, aiding the Fifth Division. The latter had, by a night attack, approached close to Shatotzu, where it was checked and suffering severely from a cross fire. The attack of the Fourth Division and the fire of its artillery from near Takushinpu relieved the situation.

The Eighth Division, leaving 5 battalions at Nienkuantun and Yulinpu, withdrew behind the old railway embankment and marched to Fentai, via Lanshantai and Jahen, to take the place of the Seventh Division. The Third Division extended its left by dispatching 2 battalions of infantry and 1 of artillery to near Fentai. The action of the Third Division was confined mainly to artillery fire.

In the Japanese Third Army the Ninth Division was withdrawn and sent to the left of the First Division. The Seventh Division moved to its left, occupied the ground vacated by the Ninth Division, and attacked the line Santaitzu-Tachiatun but was repulsed. The First Division, having been repulsed in a night attack on the line Santaitzu-Yuanchentun, was attacked from the north by General Herschellmann and Colonel Borisov and the left forced back to Chengitun, with the exception of a small party of Japanese who reached Santaitzu and barricaded themselves in some fanzas on the northeast edge of the village, repulsing all efforts to dislodge them. The reserves of the Japanese First Division checked this counter attack about 1 p. m. and another detachment from the First Division again attacked Yuanchentun at 2 p. m. At 6 p. m. the Russians again advanced and drove the left of the First Division back to Chengitun, where it was enabled to make a stand by the arrival of a brigade from the general reserve.

The Ninth Division, from Taochiatun, attacked toward Hsiao chiaotzu with its main body and Hushihtai with a detachment. The main body reached Kuoshantun; the detachment reached Waishdtzu.

The opposing cavalry divisions were still in the vicinity of Tashintun and Houshintun.

General Kuropatkin decided to retreat to Tiehling and ordered that during the night the armies retreat to a line through Hushihtai station, Puho, and farther east; the Third Army to withdraw from the bridgeheads, using the Mandarin road without entering Mukden; the Second Army to cover the retreat of the Third Army from the west and then to retreat along the railway in succession from its left flank; the First Army to cover the retreat of the Third Army with its right corps and to withdraw, covering the roads leading from the line Fuling-Fushun-Yingpan toward Tiehling.

At the time this order was issued General Kuropatkin had received no information regarding the piercing of the line at Kiusan, and intended to make a vigorous attack westward with the detachment of General Milov and thus further facilitate the withdrawal of the Third and Second Armies.

In the withdrawal the 14 battalions and 47 guns remaining with the Sixth Siberian Corps were to follow the road, running practically parallel to the Mandarin road, from Muchiapu to Lienhuachi; the Fifth Siberian and Seventeenth Corps, 31 battalions and 120 guns, were to follow the Mandarin road, the first passing west, the second east of Mukden, after passing which the Seventeenth Corps was to form the rear guard of the Third Army. In the Second Army General Tserpitski with his 45 battalions and 164 guns was to move from Lanyutun to east of the railway and then through Yuanchentun, Tsuerhtun, and Kuchentzu, keeping abreast the Third Army; the Twentieth-fifth Division and First Siberian Corps, 52½ battalions and 144 guns, were to move through Wasia along the west side of the railway without crossing the same, the Twenty-fifth Division leading and the First Siberian Corps following successively from its left flank. The rear guards of the three columns of the Second Army were to maintain connection. General Launitz, reenforced

to 46 battalions and 118 guns, was to cover the withdrawal by holding the Tachiatun-Santaitzu-Yuanchentun line, drive the Japanese back to the line Tachiatzu-Kuochitun and withdraw to Hushihtai by detachments from his left flank.

On March 10 the left column of the Japanese Fifth Army and the Second Division, First Army, attacked the positions north of Fushun, Kapukai, and Tita, occupied by rear guards of the Russian First Army. These rear guards offered such resistance that the entire day was occupied by the Japanese in reaching a line through Manyutsuantzu. The Twelfth Division carried the line northeast of Holungtien and completed the occupation of the Hushinpu region. The Guards carried the positions on the heights northwest of Kiusan and followed the retreating rear guard to, and displaced it from, the line Pinglaotzu-Talingtzu, from where the artillery of the Japanese advance guard fired upon the retreating columns passing north along the railway and Tiehling road.

In the Japanese Fourth Army the Tenth Division carried the positions north of Tichiafang and east of Fuling and followed the rear guard to a line from east of Kuanchiakou to Tsaochiakou, where it was brought to a stand by a counter attack. About 11 a. m. it occupied the heights north of Tsaochiakou and fired on the retreating columns on the Tiehling road. The reserve of the Tenth Division, which at midnight had crossed the Hun northeast of Yankuantun, drove back a Russian force from near Sanchiatzu and Maochiatun and advanced to a line from northeast of Yulingpu to Erhtaitzu, where it was brought to a stand by the Seventeenth Corps retiring in front of the Japanese Sixth Division, which at midnight had crossed the Hun southwest of Yankuantun, and had overtaken a portion of the Seventeenth Corps at a point east of Mukden.

In the Japanese Second Army, as the Russians successively withdrew from south to north from their positions, the Fourth, Fifth, and Third Divisions advanced and drove off the opposing rear guards. The Fourth and Fifth Divisions reached points southwest and west of Mukden by nightfall, portions of both divisions entering the city about 7 p. m.

The Eighth Division, about noon, advanced to a line from Chinsotun through Tapingchuang to Hsiaochiatun and, at

night, with the main body, occupied the hills on which the north Tombs are situated.

In the Japanese Third Army the Seventh Division had made a night attack on the Santaitzu-Tachiatun line, in which 4 battalions succeeded in entering the walled inclosure of the north Tombs. The remainder of the attacking force was repulsed, thus leaving the 4 battalions isolated until toward evening, when Tachiatun was finally carried by the remainder of the Seventh Division.

The First Division carried Santaitzu about 5 p. m. and Yuanchentun a little later. The Ninth Division, assisted by the Second Artillery Brigade, carried Tungchangshan shortly after noon. The detachment in front of Waishutzu made an unsuccessful attack on and withstood a counter attack from Hushihtai.

General Milov succeeded in holding a line west of the railway, running from Waishutzu through Hsiao chiaotzu to Yuanchentun, until the main bodies of the troops from the southwest had cleared the narrow space that still separated the Japanese First and Fourth Armies on the east from the Third Army on the west. The troops under General Milov had been reinforced during the day by various fractions from the retreating columns.

The battle of Mukden proper came to an end with the 10th of March, although many scattered detachments of Russians surrendered to the Japanese at a later date, and the pursuit did not end until Tiehling had been occupied on March 16.

As a result of the battle the Japanese captured 66 guns, 62,200 rifles, 277,700 rounds of artillery ammunition, 26,640,000 rounds of rifle ammunition, the tramways that had been used to supply the Russian positions, and various quantities of supplies that had been abandoned by the Russians.

The Japanese reported their losses at about 50,000 killed and wounded. The Russians reported 273 officers and 8,626 men killed, 1,576 officers and 49,426 men wounded and 336 officers and 31,253 men missing, making a total of 2,185 officers and 89,305 men. Of the missing Russians, about 20,000 were made prisoners; the remainder properly belongs to the killed.

The Japanese forces that pursued the Russians were principally from the left column of the Fifth Army, the Second and Twelfth Divisions of the First Army, and, for a short distance, the Eighth Division of the Second Army.

The Russian rear guard took position at the Fan River; troops from the First Army on the right flank, and the divisions of General Mishchenko, who had now returned to duty, on the left. On March 14 the Japanese Second and Twelfth Divisions attacked this position. The advance troops suffered a repulse, but, with the arrival of reinforcements, the position was carried, and the pursuit continued through Tiehling, which was captured on March 15 after but slight resistance.

The Russian army occupied a position, through Fenghua and Ssupingkai, perpendicular to the railway, the left detachment at Heilungcheng.

The Japanese occupied a position through Fakumen, Changtufu, and Kaiyuan, the right detachment in the vicinity of Hsingking.

Contact between the two armies was regained and daily skirmishes, of greater or less severity, continued without any important change of position on the part of either combatant until an armistice between the opposing armies was entered into on September 14, 1905.

NAVAL OPERATIONS.

On February 6, 1904, Vice-Admiral Togo left Sasebo, conveying the transports *Tairen*, *Otaru*, and *Heijo*, carrying troops of the Twelfth Division to Chemulpo.

The fleet rendezvoused off Mokpo on the 7th, and Rear Admiral Uryu, with the Fourth Division, was detached to convoy the transports to Chemulpo, while the main fleet proceeded to the vicinity of the Elliott Islands. From this rendezvous one flotilla of torpedo boats and destroyers was sent to Talienwan Bay, another to Port Arthur, with orders to blow up the Russian vessels. The Talienwan flotilla found no Russian vessels and returned to the rendezvous. The other flotilla found the greater part of the Russian squadron lying outside the harbor of Port Arthur. The torpedo boats

advanced and discharged torpedoes, striking the *Czarenich*, *Retvizan*, and *Pallada*. All three vessels were seriously injured, but were subsequently repaired by the Russians.

Rear Admiral Uryu's division arrived off Chemulpo on the afternoon of February 8. The *Chiyoda*, which had been lying in Chemulpo Harbor since the preceding December, left on the 7th, about 11.30 p. m., and joined the Japanese division.

The Russian cruiser *Varyag* and gunboat *Koryetz* were also lying in the harbor. The latter steamed out on approach of the Japanese division and fired a shot, said by the Russians to have been accidental, and the Japanese replied by discharging two torpedoes, both ineffective. The *Koryetz* then returned to the harbor.

When the landing of troops from the transports was completed the Japanese transports and division steamed outside the harbor, and Rear Admiral Uryu demanded of the commander of the Russian vessels that they leave the harbor before noon of February 9 under penalty of being attacked in the harbor; such attack not to take place before 4 p. m., February 9, 1904.

The notice was also conveyed to the foreign warships in the harbor by the Japanese consul at Chemulpo.

About noon the Russian vessels steamed out, and, after an engagement of about thirty-five minutes, returned to the harbor, where the *Koryetz* was blown up by her commander, and the *Varyag* burned the same evening. The Russian transport *Sungari*, lying in the harbor, was burned to prevent capture by the Japanese.

The Japanese suffered no casualties. The Russians had about 100 killed and wounded. The wounded and other survivors were temporarily received on British, French, and Italian war ships.

Besides the torpedo-boat flotilla the Japanese division consisted of the *Asama*, *Chiyoda*, *Naniwa*, *Takashiho*, *Akashi*, and *Niitaka*.

On the morning of the 9th Admiral Togo approached Port Arthur with his squadron and engaged the Russian ships and batteries at long range for about two hours. As a result of this engagement, the *Poltava*, *Diana*, *Askold*, and *Novik* were injured. The Russians lost 10 men killed and 2 officers and 44 men wounded. The Japanese lost 4 killed and 54 wounded,

3 officers being killed and 14 officers and cadets wounded. Several of the Japanese vessels were struck, but none seriously damaged.

The Japanese fleet, in addition to the destroyers and torpedo boats, contained the battle ships *Asahi*, *Mikasa*, *Hatsuse*, *Shikishima*, *Fuji*, *Yashima*, the armored cruisers *Tokiwa*, *Azuma*, *Iwate*, *Yakumo*, *Idzumo*, the protected cruisers *Takasago*, *Chitose*, *Yoshino*, *Kasagi*, and the dispatch boat *Tatsuta*. The Russian fleet, under Vice-Admiral Stark, in addition to the destroyers and torpedo boats, contained the battle ships *Retvizan*, *Sevastopol*, *Czarevich*, *Poltava*, *Petropavlovsk*, *Peresviet*, *Pobieda*, the armored cruiser *Bayan*, the protected cruisers *Askold*, *Diana*, *Pallada*, *Novik*, *Boyarin*, and gunboats *Bober*, *Otvazhni*, *Gremiashchi*, *Dzhizhit*, *Rasboinik*, and *Gilyak*.

On February 11 the Vladivostok squadron, consisting of the *Gromoboi*, *Rossia*, *Rurik*, and *Bogatir*, fired on the Japanese steamers *Naganura Maru* (700 tons) and the *Zensho Maru* (200 tons) in the vicinity of the Tsugaru Straits. The latter vessel escaped; the former was sunk, two of her crew being drowned.

On February 12 the Russian torpedo transport *Yenisei* struck a mine which she had just laid in Talienwan Bay, and sank; 4 officers and 92 men were lost. The *Boyarin* in endeavoring to aid the *Yenisei* also struck a mine and subsequently sank from her injuries.

On the night of February 13 the fourth torpedo-boat flotilla, consisting of the *Murasame*, *Harusame*, *Asagiri*, and *Hayatori*, under Commander Nagai, was dispatched against the Russian vessels at Port Arthur. The vessels of the flotilla were separated by stress of weather, and two failed to reach Port Arthur. The *Asagiri* arrived near the entrance about 3 a. m. on the 14th, was fired on, discharged a torpedo and retired. The *Hayatori* did likewise about 5 a. m. Neither torpedo was effective.

On February 16 the armored cruisers *Nisshin* and *Kasuga* (formerly *Moreno* and *Rivadavia*, each of 7,770 tons displacement and launched in 1903 and 1902, respectively, at Sestri Ponente, Italy), purchased by the Japanese from the Argentine Republic shortly before the outbreak of the war, arrived at Yokosuka.

FIRST ATTEMPT TO BLOCK PORT ARTHUR.

The First and Third Squadrons made an unsuccessful attempt on the morning of February 24 to block Port Arthur. Five steamers, the *Tenshin Maru* (2,942 tons), *Hokoku Maru* (2,766 tons), *Jinsen Maru* (2,331 tons), *Buyo Maru* (1,163 tons), and *Bushu Maru* (1,249 tons), loaded with artificial stone and manned by 77 volunteer officers and crew, were to be taken to the entrance and there sunk by being blown up. A torpedo-boat flotilla composed of the *Murakumo*, *Yugiri*, *Shiranui*, and *Kagero*, under command of Captain Mano, was to reconnoiter and destroy the Russian ships. The torpedo boats *Hayabusa*, *Kasasagi*, *Manazuru*, *Chidori*, and *Tsubanu* were to pick up the crews of the sunken vessels.

About 2.30 a. m. the Russian searchlights revealed the presence of the Japanese vessels, which were fired upon by the fortifications and the *Retvizan*, which was still lying beached near the entrance to the harbor, under Golden Hill. The Russian guard ship was driven back by the torpedo-boat flotilla. The *Tenshin Maru* grounded on the east coast of Laotiehshan in endeavoring to avoid the Russian searchlights and after being more or less damaged by fire. The steering gear of the *Bushu Maru* was struck and the vessel grounded not far from the *Tenshin Maru*, and was then blown up by the crew. The *Buyo Maru* was so seriously damaged that she sank before reaching the harbor entrance. The *Hokoku Maru* and *Jinsen Maru* reached the entrance and were successfully blown up, the former near the lighthouse on Tiger's Tail, the latter under Golden Hill, near the *Retvizan*.

With the exception of three men slightly wounded, the crews of the vessels were uninjured and all safely picked up, after having taken to their boats, by the destroyers. The last of them were not picked up until the afternoon. One man was killed on one of the destroyers.

On February 24 the First and Third Squadrons approached Port Arthur and engaged in an exchange of long-range fire with the *Bayan*, *Askold*, and *Novik* lying outside the harbor, and into which they withdrew. During this engagement the Second (Armored Cruiser) Squadron, under Vice-Admiral Kamimura, discovered and chased two Russian destroyers

near Laotiehshan, coming from a westerly direction. One of the destroyers escaped; the other, the *Vnuchitelni*, was driven into Pigeon Bay and destroyed.

On February 19 Admiral Makarov left St. Petersburg, to supersede Admiral Stark in command of the Russian fleet at Port Arthur.

On March 6 the Japanese Armored Cruiser Squadron (7 ships) bombarded Vladivostok from a range of about 5 miles, but received no reply from the fortifications.

On the 9th the Russians sank two vessels—the *Harbin* and the *Hailar*—outside the entrance to the harbor, for the purpose of deranging any subsequent attempt to block Port Arthur. Two other vessels were sunk later for the same purpose.

During the early morning of March 10 a flotilla of Japanese destroyers, commanded by Captain Asai, laid mines outside Port Arthur Harbor. At the same time a second flotilla encountered 6 Russian torpedo-boat destroyers and a severe engagement at short range ensued. Considerable damage resulted on both sides. The Russian destroyer *Stereguschi* was finally taken in tow by the Japanese destroyer *Sazanami*, but the towline parted and the former sank.

The *Bayan* and *Novik* steamed out to the assistance of the *Stereguschi*, but returned to the harbor on the approach of the Japanese fleet, which engaged in a long-range fire with the fortifications.

In the engagement between the destroyers the Japanese lost 9 killed and 12 wounded. The Russians lost 3 killed, 34 wounded, and 4 captured on the *Stereguschi*.

On March 16 a Russian destroyer—the *Skori*—while searching for mines near Port Arthur struck one and was lost.

On the night of March 21-22 two flotillas of Japanese destroyers laid mines in the outer harbor of Port Arthur. The main squadron arrived off the harbor on the morning of the 22d, a portion of the fleet having proceeded to Pigeon Bay, and a long-range fire was exchanged with the fortifications, a portion of the fire being indirect and over the Laotiehshan. The Russians on land had 5 killed, 9 wounded, and 1 accidentally injured.

SECOND ATTEMPT TO BLOCK PORT ARTHUR.

On March 27, about 3 a. m., the Japanese made a second attempt to block Port Arthur, sending 4 vessels to be sunk in the channel, under the protection of the destroyers *Shirakuma*, *Kasumi*, *Asashio*, *Akolsuki*, *Ikazuchi*, *Akebono*, *Oboro*, *Inazuma*, *Usugumo*, *Sazanami*, *Shinonome*, and the torpedo boats *Karigane*, *Aotaka*, *Hato*, *Tsubanu*, *Kasasagi*, and *Manazuru*.

The *Chiyo Maru* (1,746 tons) anchored about one-half chain from shore, on the western side of Golden Hill, and blew herself up. The *Fukui Maru* (1,294 tons) advanced a little farther past the port side of the *Chiyo Maru*, was struck by a Russian torpedo and then blew herself up. The *Yahiko Maru* passed the port side of the *Fukui Maru*, anchored, and blew herself up. The *Yoneyama Maru* (2,693 tons) collided with a Russian destroyer, then passed between the *Chiyo Maru* and *Fukui Maru* and reached the middle of the fairway, where she was struck by a Russian torpedo, blown up and sunk, the momentum driving her over to the left shore.

Among the crews of the blocking vessels there were killed 1 officer (Commander Hiure on the *Fukui Maru*) and 3 men; wounded, 3 officers and 6 men.

The Russian destroyer *Silini* in engagement with the Japanese destroyers, had 7 killed and 13 wounded, stranded on the rocks near Golden Hill, but was taken into the harbor.

On March 30 the commander of the *Akitsushima* accompanied the Japanese consul-general at Shanghai in the inspection of the arms removed from the Russian gunboat *Mandzhur*, which had been in that port since the outbreak of the war and from which the vital parts of machinery had been removed on March 28.

During the early morning of April 13 the Japanese mine ship *Koryu Maru* succeeded in laying some mines near the entrance to Port Arthur, being accompanied by the fourth and fifth destroyer flotillas and the fourteenth torpedo-boat flotilla. At dawn the second destroyer flotilla discovered the Russian destroyer *Strashni*, which had become separated from her own flotilla during the night while cruising outside the port, and after a short engagement sank her. A second

Russian destroyer, coming from the direction of Laotiehshan, was attacked, but escaped into the harbor.

The *Bayan* approached and picked up as many of the *Strashni's* crew as possible, at the same time returning the fire of the destroyers and the Japanese Third Squadron, which had arrived off Port Arthur about 8 a. m. The *Novik*, *Askold*, *Diana*, *Petropavlovsk*, *Pobieda*, and *Poltava* joined the *Bayan* and followed the slowly retiring Third Squadron about 15 miles to the southeast. The Japanese First Squadron, which was concealed in the fog about 30 miles off and had been called by wireless telegraphy, arrived. The Russian fleet then retired toward the harbor. About 8.30 p. m. the *Petropavlovsk* struck two of the mines laid by the *Koryu Maru* the preceding night; the explosion extended to the boilers and magazines, and the vessel broke in two and sank. Her complement was 650, and only about 6 officers and 30 sailors escaped. Vice-Admiral Makarov, Rear-Admiral Molas, and Captain Jakovlev were among the killed; the Grand Duke Cyril was among those who escaped. The *Pobieda*, while endeavoring to rescue the survivors of the *Petropavlovsk*, also struck one of the mines and was seriously injured. She succeeded in reaching the harbor, however, and was subsequently repaired.

On the night of April 25 the *Kinshu Maru*, which had the preceding day carried a company of Japanese infantry from Gensan to Iwon, and again had the company on board, was torpedoed and sunk by a vessel of the Vladivostok squadron. Those troops on board which had not taken advantage of the one hour granted to leave the vessel, thus becoming prisoners, were lost.

Vice-Admiral Kamimura's (armored cruiser) squadron, after searching for the survivors of the *Kinshu Maru*, approached Vladivostok and fired on two Russian torpedo boats, which retired to the harbor, and the fortifications. The latter returned the fire. No loss was reported on either side.

In the latter part of April the Russian destroyer *Beschumni*, while searching for mines, struck one and was seriously damaged. She succeeded in returning to port, and was subsequently repaired.

THIRD ATTEMPT TO BLOCK PORT ARTHUR.

About 2 a. m. on May 3 the Japanese made a third attempt to block the entrance to Port Arthur. The vessels actually sunk consisted of the *Tatomi Maru* (1,953 tons), *Sagami Maru* (1,926 tons), *Mikawa Maru* (1,967 tons), *Sakaru Maru* (2,978 tons), *Odaru Maru* (2,547 tons), *Asagao Maru* (2,464 tons), *Aikoku Maru* (1,781 tons), and *Yedo Maru* (1,724 tons). Four other vessels, the *Fusan Maru*, *Nagato Maru*, *Shibata Maru*, and *Kokura Maru* were also to be sunk, but received the signal of recall during the night after the fleet was scattered by storm and did not proceed to the entrance.

The convoy of the blocking vessels, under Commander Mineo Hayashi, consisted of the gunboat *Akagi* (Commander Hideshin Fujimoto), gunboat *Chokai* (Commander Danjiro Iwamura), the second destroyer flotilla (Commander Ichiro Ishida), the third destroyer flotilla (Commander Mitsukane Tsuchiya), the fourth destroyer flotilla (Commander Gunkichi Nagai), the fifth destroyer flotilla (Commander Ganjiro Manc), the ninth torpedo-boat flotilla (Lieutenant-Commander Michisuke Olaki), and the fourteenth torpedo-boat flotilla minus the *Kasasagi* and *Manazuru* and plus torpedo boats Nos. 67 and 70 (Commander Yoshimaru Sakurai). Of the eight steamers, five, the *Mikawa*, *Tatomi*, *Yedo*, *Odaru*, and *Sagami*, reached the entrance, the *Mikawa* penetrating beyond the boom that had been stretched. The *Asagao* was sunk near the shore of Golden Hill; the *Sakaru* and *Aikoku* sank before reaching the entrance. The latter three were probably sunk by Russian mines, torpedoes, and fire, while the first five were probably sunk by their own crews as well as from injuries inflicted by the Russians.

Of the crews of these steamers the Japanese reported 5 killed, 88 missing, and 23 wounded, while 41 were rescued uninjured. The entire crew of the *Sakaru*, *Odaru*, *Asagao*, and *Sagami* were reported as killed or missing.

The Russians reported that they rescued 30 Japanese, among whom were 2 officers severely wounded.

The Japanese torpedo boat No. 67 had her boiler damaged by shells, in addition to 3 of her crew being wounded, but was towed out of danger by torpedo boat No. 70. The destroyer *Aotaka* had her engine on the port side damaged

and 1 man killed. The destroyer *Hayabusa* had 1 man killed.

A division of the Third Squadron, Rear-Admiral Dewa in command, arrived off the harbor about 6 a. m.; a division of the First Squadron, Rear-Admiral Nashiha in command and Vice-Admiral Togo also present, arrived at 9 a. m. Both divisions covered the action of the destroyers and torpedo boats, searching for the survivors throughout the day.

The total value of the 17 vessels used by the Japanese in the three attempts to block Port Arthur is given as 3,000,000 yen.

On May 12, while endeavoring to destroy a Russian mine in Kerr Bay, the Japanese torpedo boat No. 48 was sunk by its unexpected explosion, 14 of the crew losing their lives.

The Third Squadron continued the search for mines in that locality, and on the 14th, when about to end the search for that day, a mine exploded under the stern of the dispatch boat *Miyako*, which sank in twenty-three minutes. Of the crew, 2 were killed, 1 severely wounded, and 21 slightly wounded.

During this searching for mines the various vessels of the squadron occasionally bombarded points on land, some of which were occupied by Russians who were opposing the searching for mines. No casualties seem to have resulted on either side.

On May 14, during the absence of the blockading vessels, the Russians laid mines off Port Arthur in the path in which the blockading vessels usually cruised. The blockading vessels returned on May 15; the *Hatsuse* struck one of the mines and, about thirty minutes later, struck a second mine which exploded the magazine, sinking the vessel almost immediately. About 300 of her complement of 741 were saved. A destroyer flotilla emerged from Port Arthur, but was repulsed by the other Japanese vessels. The *Yashima* also struck a mine, was taken in tow, but sank before reaching a place of safety.

On the same day the *Kasuga* collided with the *Yoshino*, in a dense fog at sea near the Shantung promontory, striking her on the port side near the stern. The *Yoshino* quickly sank, only about 90 of her complement of 360 being saved.

On May 16 and 17 a division of the Third Squadron, Rear-Admiral Togo commanding, reconnoitered the coast near Kaiping, firing at some Russian troops near the shore, then proceeded to Chinchou Bay, dragged for mines and entered the bay, the gunboats proceeding to the head of the bay and firing on the railway bridges, buildings, and one military train which was passing. On the 17th, also, the destroyer *Akatsuki*, while engaged in the blockade of Port Arthur, struck a mine and sank. The gunboat *Oshima* was sunk in a collision on the 18th while cruising in Liaotung Bay, cooperating with the army.

On May 20 a gunboat detachment and several torpedo-boat and destroyer flotillas approached close to the harbor of Port Arthur to reconnoiter and plant mines. In the firing that ensued several of the vessels were struck, but none seriously damaged. The destroyer *Akatsuki* was struck by a shell which killed her commander, Lieutenant Naojira Suyetsuga, and 24 sailors.

On May 20 the Russian cruiser *Bogatir* struck a rock at the entrance to Vladivostok Harbor. She was afterwards floated, repaired, and held at Vladivostok ready for use.

On May 26 four gunboats and a torpedo-boat flotilla assisted the Japanese Second Army in the attack on Nanshan from Chinchou Bay. The gunboats *Akagi* and *Chokai* with the first torpedo-boat flotilla approached the shore and engaged in the morning. A shell grazed the *Chokai*, wounding Lieutenant Kohno, killing 2 men, and wounding 2. A little later the gunboats *Tsukushi* and *Heiyen* approached, after soundings had been taken by a detachment of torpedo boats, and joined in the bombardment, but withdrew about 11 a. m. on account of the ebbing tide.

The *Akagi* and *Chokai* and a part of the torpedo-boat flotilla remained, taking part in the battle until the end. A shell exploded on the side of the *Chokai*, killing Commander M. Hayashi and wounding Lieutenant M. Sato and 3 men.

Reporting on the battle of Nanshan, General Oku said: "In concluding this report we profoundly thank the navy for its invaluable assistance."

During the same battle the Russian gunboat *Bober* bombarded the Japanese left flank from Talienwan Bay, causing serious loss.

On the night of May 26, while reconnoitering the coast of Laotiehshan, the Russian destroyer *Vnimatelni* ran on the rocks and was lost.

On the 7th and the 8th of June a division of the Third Squadron bombarded various points on the coast near Kaiping, disturbing some detachments of Russian troops. On the 13th the mine-laying ship *Taihoku Maru*, by the unexpected explosion of a mine she was laying, lost 19 killed and 17 wounded.

On June 15 the Vladivostok squadron, *Rossia*, *Rurik*, and *Gromoboi*, encountered several Japanese transports and merchantmen near Okinoshima Island, sank the *Izami Maru* and *Hitachi Maru* and disabled the *Sado Maru*. The *Hitachi Maru* had on board about 1,095 of the Guards Kobi reserves and a mercantile crew of 120. Of those on board the 2 vessels 77 Japanese were made prisoners. Of the crew of the *Hitachi* 17 out of 102 were picked up either by the *Sado* or by boats sent out for that purpose. The greater part of the troops on board were killed by the Russian fire, or were drowned.

Of the *Sado Maru* 8 were made prisoners, 83 escaped, and 29 were lost. Many jumped overboard, thinking the vessel was sinking, and subsequently regained the *Sado* after the Russian vessels had withdrawn. Of the *Izami Maru* 47 were made prisoners and 37 were lost.

The Japanese Second Squadron, Vice-Admiral Kamimura commanding, searched the waters near Okinoshima for several days, but was unable to discover the Vladivostok squadron except with the scout boat *Tsushima*.

On June 23 the Russian fleet made a sortie from Port Arthur. Repairs had been made to such an extent that the following vessels took part: *Bayan*, *Diana*, *Askold*, *Sevastopol*, *Poltava*, *Peresviet*, *Pobieda*, *Retvizan*, *Czarevich*, *Pallada*, *Gremiashchi*, *Otvazhni*, *Gardamak*, *Vsadnik*, and 13 torpedo boats.

The fleet began emerging in the early morning, and the Japanese destroyers, on guard off the harbor, notified the various detachments of their fleet, which soon began to appear from various directions.

After emerging from the entrance the Russian fleet anchored until about 2 p. m., when it got under way, preceded by tend-

ers and torpedo boats dragging for mines, which was opposed by the Japanese torpedo boats.

The Russian fleet continued on a southerly course until nearly sunset and then turned toward Port Arthur. The Japanese fleet had completed its concentration, and at about 9.30 p. m. the fourteenth torpedo-boat flotilla, followed by the fifth made an attack on the rear of the Russian fleet when the latter was about 5 miles from Port Arthur. The Russian vessels did not attempt to enter at night, but anchored just outside the harbor, where they were attacked by torpedo boats several times during the night.

The *Sevastopol* either struck a mine or was struck by a torpedo. The best evidence is that it was a torpedo fired from the *Shirakumo*, Lieutenant-Commander Wakabayashi commanding, which succeeded in approaching closely by making a detour under cover of Yenchang promontory.

Early the next morning all the Russian vessels, including the *Sevastopol*, steamed or were towed into the harbor.

The *Shirakumo* was struck by a shell that caused a fire, killed 3 men and wounded 1 officer and 2 men. The *Chidori* was struck in her aft engine room by a shell which did not explode. A cadet on board No. 53 was wounded. Nos. 64 and 66 were struck by shells, but not seriously injured.

On the night of June 27 the twelfth torpedo-boat flotilla, Lieutenant-Commander Yamada commanding, attacked and claimed to have sunk the Russian patrol ship at Port Arthur, and also a Russian destroyer in the ensuing fight. The loss of these vessels was not verified. The Japanese lost 14 killed and 3 wounded.

On June 30 a Russian torpedo-boat flotilla with the transport *Lena* made a reconnoissance of the port of Gensan, sank a Japanese steamer and sailing vessel and fired on the Japanese settlement and troops, wounding 2 Japanese and 2 Koreans. Some of the shells started conflagrations which were, however, soon extinguished.

On July 1, at 6.20 p. m., the Japanese Second Squadron, Vice-Admiral Kamimura commanding, sighted the Vladivostok squadron, Vice-Admiral Bezobrazov commanding, as it was about to pass south through the eastern channel of Tsushima Straits. The Russian squadron turned to the northeast, followed by the Japanese squadron, whose torpedo-boat

flotilla closed to within a distance of about 2 miles, and was fired on by the Russian vessels. At about 8.50 p. m. the Russian vessels extinguished all lights and eluded their pursuers.

On July 5 the Japanese gunboat *Kaimon* struck a Russian mine off Dalny and sank; her commander, Commander Takahashi, a paymaster, gunner, and 19 sailors were lost.

In the early morning of July 9 the sixth torpedo-boat flotilla under Lieutenant-Commander Uchida, approached the entrance of Port Arthur, and No. 58, Lieutenant Nakamuda commanding, discharged a torpedo, which was not effective, at the *Askold*. Nos. 58 and 59 of the Japanese flotilla each had 1 man wounded by the Russian fire.

On July 9, about 7 a. m., the Russian vessels *Bayan*, *Diana*, *Pallada*, *Poltava*, *Novik*, 2 gunboats, and 7 destroyers came out of Port Arthur, preceded by a number of vessels dragging for mines. The Japanese torpedo-boat flotilla fired on them to retard the searching for mines, and was followed by a portion of the Third Squadron which also exchanged shots with the *Bayan* about 2 p. m. About 4 p. m. the Russian vessels returned to the harbor. There was 1 sailor wounded on the Japanese destroyer *Asashio*.

In the early morning of July 11 the Japanese sixth torpedo-boat flotilla again approached the entrance to Port Arthur and endeavored to torpedo the Russian patrol boat. Nos. 57 and 59 both discharged torpedoes, but without effect.

On July 15 the *Bayan*, flying the flag of Rear-Admiral Reitzenstein, *Retvizan*, *Askold*, *Novik*, the gunboats *Otvazhni*, *Gremiashchi*, and *Gilyak*, and a torpedo-boat flotilla enfiladed the left of the Japanese line near Port Arthur and then returned to the harbor.

On July 20 the *Rossia*, *Gromoboi*, and *Rurik*, under Rear-Admiral Zhissen, passed through the Tsugaru Straits for the east coast of Japan to harass Japanese shipping, draw the blockading squadron away from Port Arthur, and thus allow the Russian squadron to quit Port Arthur and reach Vladivostok.

The raid resulted in considerable injury to the Japanese coasting trade. In addition, the German steamer *Arabia* was seized 100 miles off Yokohama on July 22, and sent as prize to Vladivostok on account of having in cargo contra-

band consisting of railway material and flour destined for Japan.

On July 23 the *Knight Commander*, an English ship, stopped after the Russian vessels had fired 4 guns. She was carrying to Japan 3,500 to 4,000 tons of cargo, mostly railway material. Stating that she was engaged in the transportation of contraband of war and that her coal capacity was so short they could not send her to Vladivostok without danger to themselves, the Russian took over her crew and papers and then sank her.

On July 24 the German steamer *Thea* was overhauled and sunk, being regarded by the Russians as a prize, as stipulated in the law.

On July 26 the *Bayan*, *Pallada*, and *Novik* opened fire against the left of the Japanese line near Port Arthur. The *Matsushima*, *Itsukushima*, *Chiyoda*, two other second-class cruisers, and a torpedo-boat flotilla approached the Russian ships, which, after a short engagement, returned to the harbor.

On July 30 the Russian Vladivostok squadron retired westward through the Tsugaru Straits, reporting they had seen at about 3 p. m. a cruiser, 6 torpedo boats, a sail ship, and a coast defense ship of the *Saiyen* type, that these ships were far back of the squadron and retired about 5 p. m.

During the raid the squadron sank the Japanese steamer *Rakashima Maru*, and the sailing vessels *Jizai*, *Fukushige*, *Hokusei*, and *Kyuhō*.

In the meantime the Russian volunteer fleet steamers *Petersburg* and *Smolensk* passed through the Bosphorus on July 4 and 6, respectively, were raised to the rank of Russian second-class cruisers, and searched several neutral vessels, including the British steamers *Malacca*, *Formosa*, and *Ardova*, and the German steamers *Prinz Heinrich*, *Scandia*, and *Halsatia*.

The *Malacca* was seized as prize on the claim that she was carrying war material. The British Government, however, stated such material belonged to itself. After diplomatic correspondence the *Malacca* was released and searches and seizures by the *Petersburg* and *Smolensk* ceased.

On July 24, at about 3 a. m., the fourteenth torpedo-boat flotilla and gunboats Nos. 10 and 11, commanded by Lieutenant Shozo Kuwajima and accompanied by torpedo boats

sent by the *Mikasa* and *Fuji*, attacked three Russian destroyers in Takhe Bay, where they were guarding the right flank of the Port Arthur defenses.

The torpedo boats sent from the battle ships torpedoed the *Burakov* and *Boevoi*. The *Burakov* was sunk and the *Boevoi* very seriously damaged, but managed to reach Port Arthur.

On July 26, while dragging for mines near Lungwangtang (Swansons Point), one of the Japanese gunboats got the clearing rope entangled in her propeller, began drifting toward Yenchang promontory, and was fired upon by the fortifications and attacked by one or more Russian torpedo boats that steamed up and discharged torpedoes. Commander Hirose, commanding the clearing party, approached on another gunboat and towed the disabled vessel out of danger. Commander Hirose, Lieutenant Kamura, and 9 men were wounded and 3 men were killed.

On July 26, while cruising off Port Arthur, the Japanese cruiser *Chiyoda* struck a mine, but was towed to Dalny.

On July 27, while returning to Port Arthur from a reconnaissance, the Russian cruiser *Bayan* struck a mine near the entrance, but was towed into the harbor.

On August 2 the Russian gunboat *Sivuch*, which had retired up the Liao River on the approach of the Japanese, was destroyed to prevent her falling into their hands.

During the afternoon of August 5 fourteen Russian destroyers emerged from Port Arthur and separated into three divisions; the first, of four vessels, steamed southwest; the second, of seven, steamed south; the third, of three, steamed toward Yenchang promontory. After an exchange of fire with two Japanese destroyers, *Akegono* and *Oboro*, commanded, respectively, by Commanders Kusumi Masao and Takemura Bungo, and the *Ikazuchi*, Commander Shinohara Rishichi, the Russian destroyers returned to the harbor. There were apparently no casualties on either side.

On August 9, 15 cm. shells from a Japanese shore battery struck both the *Retvizan* and *Peresviet* while at anchor in the west port. The former was damaged considerably, the latter but slightly. Both took part in the sortie of the following day.

At about 5 a. m., August 10, the Russian fleet of *Czarevich* (flagship of Rear Admiral Witgeft), *Retvizan*, *Pobieda*, *Peresviet* (flagship of Rear Admiral Prince Oukhtomski, commanding battleship division), *Sevastopol*, *Poltava*, *Askold* (flagship of Rear Admiral Reitzenstein, commanding cruiser division), *Diana*, *Pallada*, *Novik*, 8 destroyers and the hospital ship *Mongolia*, began emerging from Port Arthur, all being out about 8 a. m.

The Japanese torpedo boats on watch about 6 miles out were soon reinforced, the *Yakuma*, *Kasagi*, *Takasago*, and *Chitose* appearing about 15 miles to the southwest; the *Mikasa*, *Asaki*, *Fujii*, and *Shikishima* appearing about 12 miles to the south and being joined by the *Nisshin* and *Kasuga* about 10 miles to the southeast. A little later the *Akashi*, *Suma*, *Izumi*, *Akitsushima*, *Yayeyama*, and *Asama* joined the other Japanese vessels.

The Russians claimed that the Japanese torpedo boats, of which a total of 30 took part in the engagement, steamed ahead of the Russian column sowing floating mines. The Japanese denied using any mines on this occasion.

After proceeding south about 10 miles the Russian fleet turned to the east and was attacked by the Japanese, about 1 p. m., at a point about 30 miles from Port Arthur. The Russian fleet then turned toward Shantung. The engagement continued intermittently until after sunset, being heaviest from about 4 to 4.30 p. m., and again from 7 to 8 p. m., by which time the range between the leading ships of the opposing fleets was reduced to about 5,000 yards.

At about 8 p. m. the steering gear of the *Czarevich* became disabled, causing the vessel to turn sharply to port. She was followed by the *Retvizan* and a portion of the other vessels. The cause of the *Czarevich* turning to port was soon discovered and considerable confusion resulted in the Russian fleet. During the confusion the Japanese vessels ranged ahead. The main portion of the Russian fleet, except the *Czarevich*, *Diana*, *Askold*, and *Novik*, turned to starboard and headed for Port Arthur, the vessels separating.

The Japanese suffered a loss of 70 killed, including 10 officers, and 158 wounded, including 13 officers. On August 12 Admiral Togo reported that the damage to his ships had been provisionally repaired.

The Russians lost 21 officers and 324 men killed and wounded. Among the killed was Admiral Witgeft, commanding the Russian fleet.

On August 11 the *Retvizan*, *Sevastopol*, *Peresviet*, *Poltava*, *Pobieda*, *Pallada*, and the hospital ship *Mongolia* returned to Port Arthur, the first four badly damaged. Three torpedo boats also returned to Port Arthur.

The *Czarevich* and 3 destroyers went to Kiao Chow; the *Askold* and the destroyer *Grozovoi* to Shanghai; the *Diana*, to Saigon; all were subsequently disarmed. One destroyer, the *Burni*, went ashore near Weihaiwei. The *Novik* went to Kiao Chow, but cleared from the port and endeavored to reach Vladivostok.

On the night of August 10 the Russian destroyer *Ryeshitelni* left Port Arthur for Chefoo with dispatches. She was discovered the next day by the Japanese destroyers *Asashio* and *Kasumi*, under Commander Fujimoto. At 3 a. m. on the 12th Lieutenant Terashima with a detail of 10 men was sent on board to inform the Russian commander that since he had been in the port more than twenty-four hours he must issue from the harbor or surrender. During the ensuing discussion the Russian commander gave orders to blow up the vessel, seized Lieutenant Terashima, and jumped overboard. There was a struggle between the Russian and Japanese sailors, an explosion occurred in the hold, and the vessel, which had been disarmed in part, was towed out of the harbor by the Japanese at 5.15 a. m.

A protest was lodged with the Chinese Government by Russia and China demanded the return of the *Ryeshitelni*. Japan declined to accede to the demand, claiming that the harbor of Chefoo was not properly neutral territory since the Russian consulate operated a system of wireless telegraphy with Port Arthur, that the harbor had been converted into belligerent territory by the entry of the *Ryeshitelni*, that the vessel had not been disarmed at the time of Lieutenant Terashima's visit, and that the crew of the *Ryeshitelni* began hostilities!

On August 11, while bombarding the left of the Japanese Third Army near Lungwantang, the Russian gunboats *Gilyak* and *Otvazhni* were attacked and driven back to Port Arthur by the Japanese gunboats *Maya* and *Akagi*.

On August 14 at dawn Vice-Admiral Kamimura, with the armored cruisers *Idzumo*, *Iwate*, *Azuma*, and *Tokiwa*, sighted the Vladivostok Squadron under Admiral Zhiszen, and consisting of the *Rurik*, *Rossia*, and *Gromoboi*, about 20 miles off Ulsan, southeastern Korea, proceeding toward Port Arthur. The Russian fleet turned northward and firing began about 5.30 a. m. The *Rurik* was struck by a shell which wrecked the steering gear and left the vessel unmanageable. The other two vessels turned back several times to cover the *Rurik* and allow repair of her steering gear. The attempt failed, the *Rurik* began sinking by the stern, and the other two vessels steamed northward. The *Naniwa* and *Takashio*, which had now arrived, continued the engagement with the *Rurik*, and Admiral Kamimura with the other vessels pursued the *Rossia* and *Gromoboi* for about two hours and then turned back.

In the meantime the *Rurik* had sunk and the survivors were being picked up by the *Naniwa* and *Takashio*, assisted by the *Nitaka*, *Tsushima*, *Chiyoda*, and a torpedo boat flotilla, which had arrived on the scene. The *Idzumo* also returned in time to assist in the rescue.

Of the officers and crew of the *Rurik* 437 were picked up uninjured, 176 were picked up wounded. Her complement was 768. On the other two Russian vessels there were 140 killed and 313 wounded.

The Japanese casualties were 45 killed and 65 wounded. Admiral Kamimura reported the damage to his ships as slight. The *Iwate* went to Sasebo for repairs and replaced one of her heavy guns.

The *Rossia* and *Gromoboi* succeeded in reaching Vladivostok, although seriously injured. The *Rossia* was struck by 11 shells below and near the water line, the *Gromoboi* by 5. Each lost about half of its complement of officers and many sailors in killed and wounded.

On August 20 the *Novik*, which went to Kiao Chow after the naval engagement of August 10 and then sailed for Vladivostok, passing to the east of Japan, and the *Tsushima* engaged each other for about one hour near Korsakov, Sakhalin. After the engagement the *Novik* proceeded to the anchorage and the *Tsushima* drew off for repairs, having

been struck by a shell in the bunkers and so badly damaged as to list.

The *Chitose* arrived toward evening and on the 21st proceeded to Korsakov. The *Novik* was found beached and her crew was abandoning her. The *Chitose* fired on her for nearly an hour, approaching to about 2,500 meters.

A subsequent examination by the Japanese found the *Novik* listed to starboard about 30°, bow submerged except the fore deck, upper deck awash more than knee-deep.

On August 23 the *Sevastopol*, while outside the harbor bombarding the left flank of the Japanese Third Army, struck a mine and was towed back into Port Arthur.

On August 24 the Russian destroyer *Vunoslivni* struck a mine and sank about 2 miles off Laotiehshan; a second destroyer struck a mine about the same time but was towed back into Port Arthur.

On September 3 the Japanese destroyer *Hayatori*, while engaged in the blockade of Port Arthur, struck a mine and sank.

On September 11 the Russian transport *Lena*, which had been converted into a cruiser with an armament of 23 guns and a complement of 16 officers and 488 men, under command of Captain Berlinski, entered San Francisco Harbor after thirty-one days out from Vladivostok. She was subsequently disarmed and her crew interned until the end of the war.

On September 18 the Japanese coast defense vessel *Heiyei* struck a mine in Pigeon Bay and sank; but 4 out of her complement of 289 were saved.

During the month of September the Japanese cruiser *Otara*, 3,048 tons displacement, 18 guns armament, and maximum speed of 21 knots, was completed.

On the night of October 21 the Baltic Fleet, or Second Pacific Squadron, while passing over the Dogger Banks in the North Sea, fired on boats of the Hull fishing fleet, sinking the *Crane*, killing the captain and mate and wounding the remainder of the crew, 6 in number.

The Russian admiral reported he was attacked by two strange torpedo boats and that the firing was produced by such attack. The fishermen claimed no vessels other than

the Russian and fishing boats were in that vicinity. After several days of excited correspondence the two governments agreed to submit the matter to an international commission of inquiry composed of five naval officers of high rank.

The composition and organization of the Second Pacific Squadron, commanded by Vice-Admiral Rozhdestvenski, were as follows:

First battleship division: *Kniaz-Suvarov* (flying the flag of Admiral Rozhdestvenski, in immediate command of this division), *Emperor Alexander III*, *Borodino*, and *Orel*.

Second battleship division: *Oslabya* (flying the flag of Rear-Admiral Felkersham, commanding the division), *Sissoi Veliki*, *Navarin*, and the armored cruiser *Admiral Nakhimov*.

Cruiser division: *Dmitri Donskoi* (flying the flag of Rear-Admiral Enquist, in command of the division), *Aurora*, *Svietlana*, *Almaz*, *Zhemtchug*, *Kuban*, *Ural*, and *Terek*.

First flotilla of destroyers: (Captain Shamov in command) *Bodri*, *Buini*, *Bistri*, *Bezupreshchni*.

Second flotilla of destroyers: (Captain Baranov in command) *Bravi*, *Biedovi*, *Blestiashchi*.

Division of military transports and auxiliary ships.

Military transports: *Kamtchatka* (repair ship) and *Anadir*.

Auxiliary ships: *Korea*, *Malaya*, *Meteor* (condensing plant), *Kitai*, *Kniaz-Gortchakov*, *Jupiter*, *Mercury*, *Vladimir*, *Voronezh*, *Tamov*, *Yaroslav*, *Kiev* (flying the flag of Captain Radlov, in command of the division), and *Orel* (hospital ship).

The fleet proceeded in two sections, the first, under Rozhdestvenski and composed of the heavier draft vessels, proceeding via the Cape of Good Hope, the second, under Felkersham, proceeding via the Suez Canal, and rendezvoused at Nossi Be, northeast of Madagascar, where it was joined by a complementary division which passed the Suez Canal in January, 1905. This division, provisionally under the command of Captain Dobrotvorski, composed of the cruisers *Oleg*, *Izumrud*, *Don*, *Rion* (*Smolensk*), and *Dneiper* (*Petersburg*) and the destroyers *Grozni*, *Gromki*, *Prozorlivi*, *Pronzitelni*, and *Pritki*, was distributed among the divisions of the Second Squadron.

The transport *Irtish* passed through the Suez Canal on January 28, 1905, to join the Second Squadron.

Later the squadron was again reenforced in the neighborhood of Kamranh Bay, Cochin China, by the first division of the Third Squadron, which left Libau February 15, 1905, and was composed of *Emperor Nicolas I*, squadron battleship (flying the flag of Rear-Admiral Nebogatov, in command of the division); *Admiral Seniavin*, *General-Admiral Aprazin*, *Admiral Ushakov* (armored guardships); *Vladimir-Monomach* (armored cruiser); *Russ* (sea tug); *Zenia* (repair ship); *Ocean* (transport); *Kostroma* (hospital ship).

On November 6, 1904, the Japanese gunboat *Atago* was wrecked on a submerged rock in the Gulf of Pechili.

On November 16 the Russian destroyer *Rastoropni* entered Chefoo with despatches from Port Arthur. The crew was landed and the vessel blown up by her commander.

On November 30 the Japanese cruiser *Saiyen* struck a mine, while cooperating with the Third Army at Port Arthur, and sank. Of her complement of 16 officers and 213 men, the commander, Captain Tajima, and 38 others were lost.

On December 12 the *Sevastopol*, which had anchored outside the harbor at Port Arthur, was attacked by Japanese torpedo boats. All other battleships and cruisers in Port Arthur had been so badly damaged, either by the Japanese heavy siege guns and naval batteries or intentionally by the Russians, as to be helpless. In the early morning of the 13th the attack was renewed, and one Japanese torpedo boat was struck by a shell and so badly damaged that she was towed away by one of her comrades. A third attack was made about 6 a. m. The torpedoes launched by the Japanese, while exploding, did not produce their full effect on account of torpedo nets and other defensive means employed by the *Sevastopol*. There were three Japanese casualties in the attack at 6 a. m., 3 torpedo boats receiving one shot each.

On December 12 the Japanese protected cruiser *Takasago* struck a mine off the entrance to Pechili Gulf and sank. But 133 of her complement of 500 were saved by the *Otawa*, which arrived shortly after the *Takasago* sank.

On December 15 the Japanese torpedo boats again attacked the *Sevastopol*, also the coast defense vessel *Otvazhni* and the torpedo-boat destroyers, losing 3 killed and 3 wounded. It was reported unofficially that the Japanese lost a torpedo boat in these attacks on the *Sevastopol*.

On the night of December 16 the Japanese torpedo boats torpedoed and destroyed a Russian destroyer near the *Sevastopol*.

On the 22d Admiral Togo reported that the *Sevastopol* was so badly damaged that she could not, under the conditions existing in Port Arthur, be repaired. On the same day he reported that he had arranged to withdraw the combined fleet from before Port Arthur, having arranged for a closer watch to prevent ships running the blockade and to watch the remnant of the Russian squadron, consisting of the *Otvazhni* and several torpedo-boat destroyers.

On January 2, 1905, four Russian destroyers, the *Skori*, *Stratni*, *Vlastni*, and *Serditi*, arrived at Chefoo from Port Arthur, and were disarmed. Two others, the *Smirli* and *Boiki*, went to Kiao Chow, where they also were disarmed.

All war vessels remaining in the harbor were blown up by the Russians prior to capitulation. The *Sevastopol* and *Otvazhni* were towed into deep water and sunk.

About March 16, 1905, Admiral Rozhestvenski left Nossi Be and proceeded to Kamranh Bay; passing Singapore April 8 and arriving April 12. The length of his stay at the latter place was made the subject of a diplomatic protest by Japan to the French Government.

On April 22 he left Kamranh Bay with the greater part of his vessels, the remainder sailing on the 25th, and rendezvoused in the vicinity of Saddle Islands, off Shanghai, where he was joined on May 10 by Admiral Nebogatov's division, which had passed Port Said on March 24, and Singapore on May 5. Leaving at Saddle Islands and neighborhood the greater part of the transports and colliers with the converted cruisers *Don*, *Kuban*, *Terek*, *Rion* (*Smolensk*), and *Dneiper* (*Petersburg*), Admiral Rozhestvenski proceeded north with the following:

First battle-ship division: *Kniaz Suvarov* (flying the Admiral's flag), *Emperor Alexander III*, *Borodino*, and *Orel*.

Second battle-ship division: *Oslabya* (flying the flag of Rear-Admiral Felkersham), *Sissoi Veliki*, *Navarin*, and *Admiral Nakhimov*.

Third battle-ship division: *Emperor Nicolas I* (flying the flag of Rear-Admiral Nebogatov), *General-Admiral Aprazin*, *Admiral Seniavin*, and *Admiral Ushakov*.

Cruiser division: *Oleg* (flying the flag of Rear-Admiral Enquist), *Aurora*, *Vladimir Monomach*, *Dmitri Donskoi*.

Light cruiser division; *Svietlana* (flying the flag of Captain Scheine), *Almaz*, *Ural*, *Zhemtchug*, and *Izumrud*.

The torpedo boats and destroyers: *Bodri*, *Buni*, *Bravi*, *Bezupreshchni*, *Blestiashchi*, *Bistri*, *Biedovi*, *Grozni*, and *Gromki*.

Transports: *Kamtchatka*, *Anadir*, *Irtish*, and *Korea*.

Sea tugs: *Russ* and *Swir*.

Hospital ships: *Orel* and *Kostroma*.

En route from Saddle Islands to the Sea of Japan the first and second divisions of the Russian fleet formed the starboard column, the third and fourth divisions formed the port column, the vessels of the light cruiser division were used as scouts, the transports, tugs, and hospital ships followed in and in rear of the interval between the columns.

On May 27, while approaching the eastern channel of the Straits of Korea, the Russian fleet detected, at about 7 a. m., off to the right, the *Izumi*; the *Dmitri Donskoi* fired on the *Izumi*, which returned the fire and vanished in the fog.

This vessel was the left wing scout of the inner cordon, consisting of the Third (Vice-Admiral Kataoka's cruiser) Squadron preceded by scouts. The first (battle ship) division, the second (armored cruiser) division, and the fourth (Vice-Admiral Uryu's detachment) division, because of the receipt of a wireless message from one of the advanced scouts, the *Shinano Maru*, at 5 a. m., of the approach and course of the Russian fleet, rendezvoused with the torpedo-boat flotillas, about noon, at a point about 10 miles north of Okinoshima.

At this time the paper organization of the Japanese fleet was as follows:

Commander of fleet and First Squadron, Admiral Togo, with Vice-Admiral Kato as chief of staff. The First Squadron contained the first and third divisions:

The first division, Vice-Admiral Misu, contained the battle-ships *Mikasa*, *Shikishima*, *Fuji*, *Asahi*, and the armored cruisers *Kasuga* and *Nasshin*.

The third division, Vice-Admiral Dewa, contained the protected cruisers *Kasagi*, *Chitose*, *Niitaka*, *Otawa*, and

Tatsuta. It seems to have acted more or less independently of the First Squadron and was called the Dewa Detachment.

The Second Squadron, Vice-Admiral Kamimura, contained the second and fourth divisions:

The second division, Rear-Admiral Shimamura, contained the armored cruisers *Idzumo*, *Adzuma*, *Tokiwa*, *Yakumo*, *Asama*, and *Iwate*.

The fourth division, Vice-Admiral Uryu, contained the protected cruisers *Naniwa*, *Takashiho*, *Tsushima*, *Akashi*, and *Chihaya*.

The Third Squadron, Vice-Admiral Kataoka, contained the fifth and sixth divisions:

The fifth division, Rear-Admiral Takeomi, contained the armored cruiser *Chiyoda*, the protected cruisers *Itsukushima*, *Matsushima*, and *Hashidate*, and the coast-defense ship *Chinyen*.

The sixth division, Rear-Admiral Togo, contained the protected cruisers *Izumi*, *Akitsushima*, *Suma*, and *Yayeyama*. It seems to have operated more or less independently of the Third Squadron and was called the Togo Detachment.

There was a seventh division, Rear-Admiral Yamada, containing the coast-defense ship *Fusoo*, and the gunboats *Banjo*, *Chioikai*, *Uji*, *Maya*, *Tsukushi*, *Akagi*, and *Sumida*.

There were 21 destroyers divided into five divisions, the division commanders being Captains Fujimoto and Yajima and Commanders Yoshijima, Suzuki, and Hirose.

There were in the neighborhood of 60 torpedo boats, usually in groups of four, whose commanders were Lieutenants Fukuda, Kawase, Fusimota, Otaki, Wakagagashi, Aoyama, Kawada, Seko, Kondo, Matsuoka, Kubo, Ogawa, Sakamoto, Narutomi, Wada, Ibari, and Otaki.

There was also a special squadron, Rear-Admiral Ogura, containing the following auxiliary cruisers that had been called in from the merchant marine: *America Maru*, *Nippon Maru*, *Hongkong Maru*, *Yawata Maru*, *Shinano Maru*, *Ringo Maru*, *Sado Maru*, *Tainan Maru*, *Taichin Maru*, *Daijin Maru*, *Haijo Maru*, *Heijo Maru*, *Manshu Maru*, *Koryo Maru*, and *Kasuga Maru*.

Shortly after 10 a. m. the Russians saw off to the westward Vice-Admiral Dewa's detachment sailing toward the entrance

of the strait as though to intersect the course of the Russian fleet. Shortly after 11 a. m. Felkersham's division opened fire against these vessels, which went about and disappeared in the fog.

At 1.20 p. m. the Russians again saw to port some of the vessels of the Kataoka squadron and Dewa and Togo detachments, now sailing northeast to effect a junction with the main Japanese fleet near Okinoshima.

The Russian fleet had approached the straits in two columns, but at 11.40 a. m. formed into single column, the first battleship division leading and followed by the second and third battleship divisions and then the cruiser division, while to the right were the transports and scouts accompanied by the light cruiser division. At noon the course was changed to north 23° east and the leading division fell off a little to starboard and then held itself in column.

At 1.40 p. m. the Russians sighted the Japanese main fleet. At 2.05 p. m. the leading Japanese vessel turned to port and the first division, followed by the second, advanced obliquely against the head of the Russian column. The Third Squadron and the Dewa and the Togo detachments, which had now reached the Japanese main fleet, steamed south to attack the Russian rear.

The sky was clear, the horizon foggy, a moderately strong breeze was blowing from the southwest, and the sea was sufficiently high to interfere with the maneuvers of the torpedo boats.

At 2.08 p. m. the Russians at 8,500 meters opened fire, which was returned a little later by the Japanese when the range had been reduced to 6,000 meters.

The Russian transports fell off to starboard, leaving the cruisers on their left and the scouts behind them. The head of the Russian column gradually fell off to starboard, thus causing the fleet to maneuver on the arc of a circle within which were the transports and destroyers.

The second Japanese division came on to the arc of the outer circle on which their first division was maneuvering and with it concentrated their fire on the leading Russian vessels and those flying Admirals' flags, using high explosive shells at first and then armor-piercing projectiles.

At 3.10 p. m. the *Oslabya* turned turtle and sank. The greater part of the officers and crew were taken off by destroyers before the vessel sank.

The *Kniaz Suvarov* was unmanageable at this time, and in endeavoring to protect this vessel the other Russian vessels fell into more or less confusion. The Japanese first division had by this time forged ahead of the Russian column, led by the *Borodino*, heading nearly southeast. Thinking the Russian vessels had headed north to pass in rear of the second division, the vessels of the first division turned 16 points to the left and steamed nearly northwest, the *Nisshin* leading. The second division also went about and followed the first division.

Up to this time the most important damage to the Japanese fleet had been inflicted on the *Asama*, which was compelled to leave the line of battle by injuries to the steering gear and the entrance of water. After effecting temporary repairs the *Asama* rejoined the firing line.

The *Shiranui*, of the Hirose flotilla, and the *Asahiwo*, of the Suzuki flotilla, were both severely injured while attempting to torpedo the *Kniaz Suvarov* at about 3.40 and 4.55 p. m., respectively, but were saved from sinking. One of the torpedoes discharged in the latter attack struck the *Suvarov* on the port side near the stern, causing a list of about 10°.

The *Suvarov* was, however, in a helpless condition before this attack. Admiral Rozhdestvenski, wounded, and some of the members of his staff were transferred about 3.30 p. m. to the *Buini*, one of the boats which had received the crew of the *Oslabya*. The command of the fleet was then transferred to Vice-Admiral Nebogatov.

At about 4.40 p. m., having again gone about and while steaming nearly southeast, the Japanese first and second divisions lost sight of the Russian armored vessels and steamed south, the second division leading, firing on special service vessels and scouts. At 5.30 p. m. the first division went about and steamed north, while the second division steamed to the southwest and took part in the action against the Russian cruiser squadrons and service ships.

About 5.40 p. m. the first division sank the *Ural*, continued northward and came into action against six of the Russian armor clads steaming to the northeast. The first division,

steaming parallel to and faster than these vessels, caused the latter to gradually turn to the north and then to the north-west, and nearly west, the *Borodino* leading.

To the left of the Russian armor clads were the *Oleg*, *Aurora*, *Dmitri Donskoi*, and *Vladimir Monomach*; to the left of these were the remaining transports escorted by the *Svietlana* and *Almaz*; the destroyers, the *Zhemtchug*, and the *Izumrud* were still farther to the left.

About 7.20 p. m. the *Borodino*, on which a serious fire had broken out, settled to starboard and sank, apparently from the explosion of the magazine. About the same time the *Alexander III*, which had been compelled to leave the line of battle some time before, also sank.

At sunset, about 7.35 p. m., the Japanese first division drew off to the east to allow the torpedo-boat flotillas, which were approaching from three sides, to attack during the night.

During this time the cruiser squadron and special-service ships of the Russians had been engaged with that portion of the Japanese fleet which had steamed south on receipt of the battle orders at 2 p. m. The *Dewa* and the *Uryu* detachments, keeping in touch, at 2.45 p. m. opened fire against the Russian cruiser squadron while steaming parallel to and in the opposite direction, made a detour across the rear and steamed parallel to and in the same direction as the Russian vessels. This maneuver was repeated several times.

About 4.20 p. m. the *Uryu* detachment sank the *Irtish* and a little later disabled the *Kamtchatka*. At about this time the Third Squadron joined the *Dewa* and the *Uryu* detachments in the attack.

At 4.40 p. m. four Russian armor clads joined from the north with the cruiser squadron and with it inflicted considerable damage on the Japanese vessels.

Vice-Admiral *Dewa* had at that time transferred to Vice-Admiral *Uryu* all his vessels except the *Kasagi* and the *Chitose*, and with these two vessels ran into the quiet waters of *Aburadani Bay*. Vice-Admiral *Dewa* came out the same evening on the *Chitose*, but the *Kasagi* was too badly damaged to take any part in the fighting on the next day.

At 5.10 p. m. the *Naniwa*, flagship of the *Uryu* detachment, was hit below the water line and compelled to retire for repairs.

At 5.30 p. m. the Japanese second division joined in this attack on the Russian cruiser squadron and four armor clads which had joined at 4.40 p. m.

During this fighting the Dewa and Uryu detachments concentrated their fire principally on the transports, the *Svietlana*, the *Almaz*, and the *Ural*. The crew of the *Ural* was by order from the *Svietlana* transferred to the *Korea* prior to the sinking of the *Ural* by the first division at 5.40 p. m.

The *Svietlana*, struck below the water line, fell out of the line but subsequently regained her place. The *Dmitri Donskoi* and *Vladimir Monomach* several times left the line to protect the transports.

As the cruiser squadron continued to give way it uncovered the *Kniaz Suvarov* and the repair ship *Kamtchatka*, both disabled. The Togo detachment sank the *Kamtchatka* at 7.10 p. m., and the Fujimoto destroyer flotilla twice torpedoed the *Suvarov*, which sank at 7.20 p. m.

About this time the Japanese squadrons and detachments received the wireless message from the *Tatsuta* giving Admiral Togo's order to assemble at Ullondo Island, and steamed away to the northeast.

At the time of withdrawal of the various Japanese squadrons the course of the Russian fleet was north 23° west. The various Japanese torpedo-boat flotillas which had rendezvoused in Miura Bay (Tsushima) prior to the engagement, taking shelter from the high sea, attacked the Russian vessels at 8.15 p. m., the Fujimoto destroyer flotilla against the head of the armor-clad column from the north, the Yajima destroyer flotilla and the Kawase torpedo-boat flotilla from the northeast, the Yoshijima destroyer flotilla against the rear from the east, the Hirose (Juntaro) destroyer flotilla from the southeast. The torpedo-boat flotillas under Fukuda, Otaki, Kondo, Aoyama, and Kawada pursued from the south both the armor-clad column and the cruisers steaming parallel with and to the left rear of the armor clads.

On the approach of the flotillas the Russian armor clads turned 8 points to port, so as to lessen the distance separating them from the cruisers. The latter also turned to port and the *Oleg*, *Aurora*, and *Zhemtchug* continued to the south, while the others, with the armor clads, again turned to port and proceeded in an eastern direction.

The fire of the flotillas was aided by the fact that their approach compelled the Russian vessels to use their searchlights, thus betraying their location and facilitating the use of the searchlights of the flotillas.

The *Sissoi Veliki*, *Admiral Nakhimov*, and *Vladimir Monomach* were torpedoed and rendered helpless. On the side of the Japanese, torpedo boat No. 69 (commander's boat) of the Fukuda flotilla, No. 34 (commander's boat) of the Aoyama flotilla, and No. 35 of the Kawada flotilla, were sunk by gun fire; their crews were saved by their companion boats, the *Karigane*, No. 31, No. 62, and others. The destroyers *Harusame*, *Akatsuki*, *Ikazuchi*, and *Yugiri* and torpedo boats *Sagi*, Nos. 33 and 68 were so badly damaged by gun fire and collisions that they were temporarily compelled to withdraw from the fight.

At 2 a. m. on the 28th the Suzuki flotilla torpedoed and sank the *Navarin*.

At dawn on the 28th the Japanese first and second divisions were about 20 miles south of Ullondo Island when the Third Squadron, from a point about 60 miles farther south, reported the presence of Russian ships to the east. These ships proved to be the battle ships *Orel* and *Emperor Nicolas I*, the coast-defense ships *General-Admiral Aprazin* and *Admiral Seniavin*, and the cruiser *Izumrud*, Admiral Nebogatov commanding. The first and second divisions approached from the west; the Third Squadron and the Uryu detachment approached from the south. At 10.30 a. m. the Russian vessels were surrounded at a point 8 miles south of Takeshima (Liancourt Rocks). The *Izumrud* escaped; the others surrendered. The *Orel* was taken to Maizuru, the *Nicolas I*, *Aprazin*, and *Seniavin* to Sasebo. The four vessels in the order given were renamed *Iwami*, *Iki*, *Okinoshima*, and *Minoshima*.

The *Izumrud*, after escaping, proceeded north, and at 1.30 a. m. on May 30, while entering Vladimir Bay, ran on a reef, where she was blown up by her commander, Captain Versen, after the crew had landed.

At 7 a. m., while proceeding northward, the Uryu detachment discovered the *Svietlana* and the destroyer *Bistri* off to the west. A section containing the *Otawa* and *Niitaka*, under command of Captain Arima, was sent in pursuit and an engagement ensued, lasting about one hour. At 11.06 a. m.

the *Sviellana* sank off Chekuryon Bay. The *Niitaka*, in cooperation with the destroyer *Murakumo*, continued in pursuit of the *Bistri*, which ran aground and was destroyed in a small bay about 5 miles north of Chekuryon Bay.

The survivors from the two Russian vessels were taken on board the Japanese special service ships *America Maru* and *Kasuga Maru*.

The Japanese destroyer *Shiranui* and the special service ship *Sado Maru*, at a point about 5 miles east of Kotosaki, Tsushima, discovered the *Admiral Nakhimov* at 5.30 a. m. on May 28, and a little later the *Vladimir Monomach*, both in a sinking condition. After the crews had been removed the vessels sank, about 10 a. m.

The *Gromki* appeared in this neighborhood, was pursued by the *Shiranui* and torpedo boat No. 63, and captured off Ulsan in a sinking condition at 11.30 a. m. She sank at 12.43 p. m., the crew having been previously removed.

The special-service ships *Shinano Maru*, *Tainan Maru*, and *Yawata Maru*, at a point about 30 miles northeast of Karaski, Tsushima, discovered the *Sissoi Veliki* in a sinking condition. The vessel sank at 11.05 a. m., the survivors being rescued.

The *Admiral Ushakov* was pursued from near the place of Admiral Nebogatov's surrender by the *Iwate* and *Yakumo* and sunk a little after 5 p. m.; about 300 survivors were rescued.

The *Dmitri Donskoi*, steaming north, was discovered and followed by the Uryu detachment at 5 p. m. She was headed at a point some 30 miles south of Ullondo Island at 7 p. m. by the *Otawa*, the *Niitaka*, and the destroyers *Asagiri*, *Shirakumo*, and *Fubuki*. The firing continued until dark, when the destroyers attacked. Although seriously damaged, the *Dmitri Donskoi* escaped from her pursuers. Toward morning of the 29th her crew was landed on Ullondo Island and the vessel sunk by opening the Kingston valves. The survivors were taken on board the *Kasuga* and *Fubuki*.

The *Buini*, after having transferred Admiral Rozhestvenski and staff to the *Biedovi*, and about 200 survivors of the *Oslabya* to the *Dmitri Donskoi*, sank.

The *Biedovi*, with Admiral Rozhestvenski and staff, was captured by the destroyers *Sazanami* and *Kagero* about 40 miles southwest of Ullondo Island about 4.45 p. m.

Of the remaining Russian torpedo boats the *Grozni* reached Vladivostok on May 29, the *Bravi* on the 31st. The *Bodri* and *Blestiashchi* escaped south in company. About 5 a. m. May 28, the crew of the *Blestiashchi*, which was no longer manageable, was transferred to the *Bodri* and the former vessel sunk by opening the Kingston valves. The *Bodri*, after exhausting her water and fuel, was picked up in latitude 32° 22' N., longitude 112° 42' E., by the British merchant vessel *Kueling* and towed into Wusung, where she was interned. The *Bezupreshchni* was missing.

The *Aurora*, *Oleg*, and *Zhemtchug*, Rear Admiral Enquist commanding, arrived on June 3 at Manila, where they were interned.

The *Almaz* reached Vladivostok on May 29.

The transport *Korea* and the sea tug *Swir* reached Wusung on May 30, and were interned, as were six other transports that had gone into that port from the vicinity of Saddle Islands.

The *Anadir* escaped and on June 28 arrived at Diego Suarez with a portion of the survivors of the *Ural*.

The *Kostroma* and *Orel* were taken to Sasebo by the Japanese on suspicion of violation of some of the provisions of The Hague Conference. The first was afterwards released, the second was confiscated.

The Russian casualties were 191 officers and 4,500 men killed and wounded and 6,143 captured.

The Japanese reported their total casualties for this engagement as 116 officers and men killed, 538 wounded; their total naval casualties for the war, 221 officers and 1,782 men killed, 170 officers and 1,497 men wounded, making a total of 2,003 killed and 1,667 wounded.

Early in June the *Dneiper* (*Petersburg*) transferred to the Dutch steamer *Flores* in the Straits of Malacca 41 of the Chinese crew and the mails of the British steamer *S. Kilda*, captured by the *Dneiper* with contraband on board in the China Sea on June 4 and sunk the next day. The European officers of the ship were retained by the *Dneiper*.

On June 5 the *Terek* sank the British vessel *Ikhona* about 150 miles north of Hongkong, transferring the crew to the Dutch vessel *Perlak*.

On June 22 the *Terek* similarly sank the Danish vessel *Princess Marie*. A few days later the *Terek* was disarmed and interned at Batavia.

On May 30 the *Don* sank the German steamer *Tetartos* in the North China Sea on the charge of carrying contraband, consisting of railroad timber and sleepers. The crew of the *Tetartos* was landed at Batavia.

OPERATIONS IN KOREA AND SAKHALIN.

In Korea the Japanese, early in 1905, began the concentration of the Sixth Army under General Hasegawa. The principal forces landed at Gensan and operated north along the coast in the direction of and against the Russian Vladivostok army under General Kasbeck, that had sent expeditions into and occupied northern Korea.

By June the advance of General Hasegawa was in contact with the Russian forces and several engagements of greater or less severity, none of which reached a magnitude to merit the designation of battle, occurred. On July 24 the Japanese dislodged the Russians from and occupied Puryang and Puku. The advent of the rainy season and the sessions of the peace conference at Portsmouth suspended serious operations on the part of these two opposing armies.

On July 7 another Japanese force landed near Korsakovsk, capital of Sakhalin, and occupied the town, the Russian garrison withdrawing after having blown up the coast-defense guns and burned the government buildings. General Hareguchi commanded the Japanese forces operating in this region; General Liapunov commanded the Russian troops.

With the aid of the fleet and transports, the Japanese proceeded to various points on the island, overpowered the small Russian garrisons, and occupied the important villages without any very serious engagements. The bulk of the Russian garrison, 70 officers and 3,200 men, surrendered July 31. The final skirmish did not take place until September 1, 1905, but four days before the treaty of peace was signed.

PORTSMOUTH CONFERENCE.

On the initiative of President Roosevelt, plenipotentiaries were appointed by the two nations, Baron Komuro and Mr. Takahira by Japan, Count Witte and Baron Rosen by Russia, to meet and discuss terms of peace.

The conference assembled at Portsmouth, N. H., August 29. The treaty was signed September 5 and ratifications were exchanged November 25, 1905.

By the terms of the treaty Russia recognized the paramount interest of Japan in Korea, transferred to Japan the Chinese East Siberian Railway south of Changchun (Kuanchengtzu), that part of Sakhalin south of fiftieth parallel, and the Russian Liaotung lease, covering an area of about 500 square miles, containing Port Arthur and Dalny (Tairen). Japanese subjects were granted certain fishing privileges along the Siberian littoral. Manchuria was returned to China, and the troops of Russia and Japan, in excess of 15 men per kilometer of railway as guards for the same, were to be withdrawn within eighteen months.

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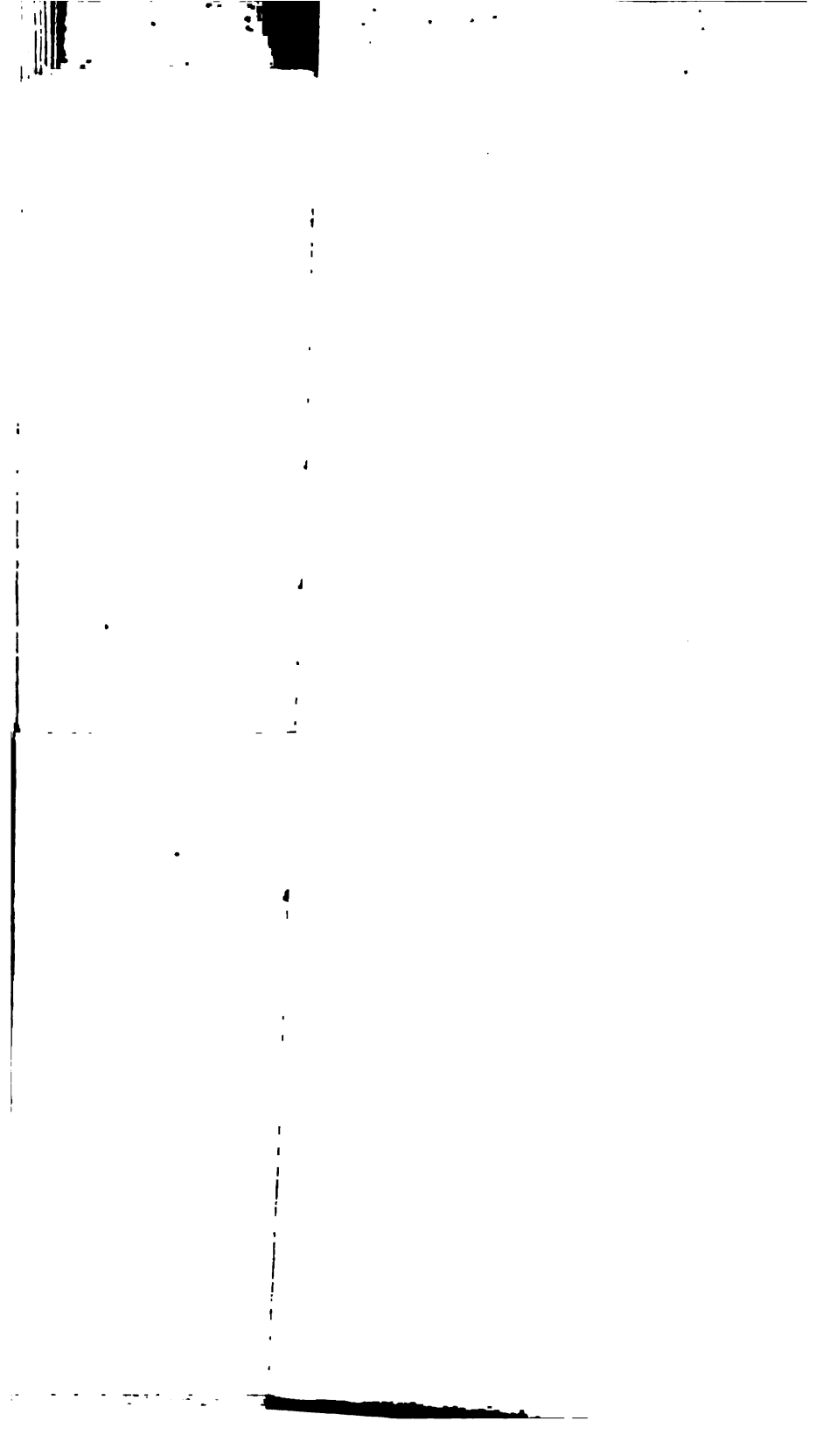
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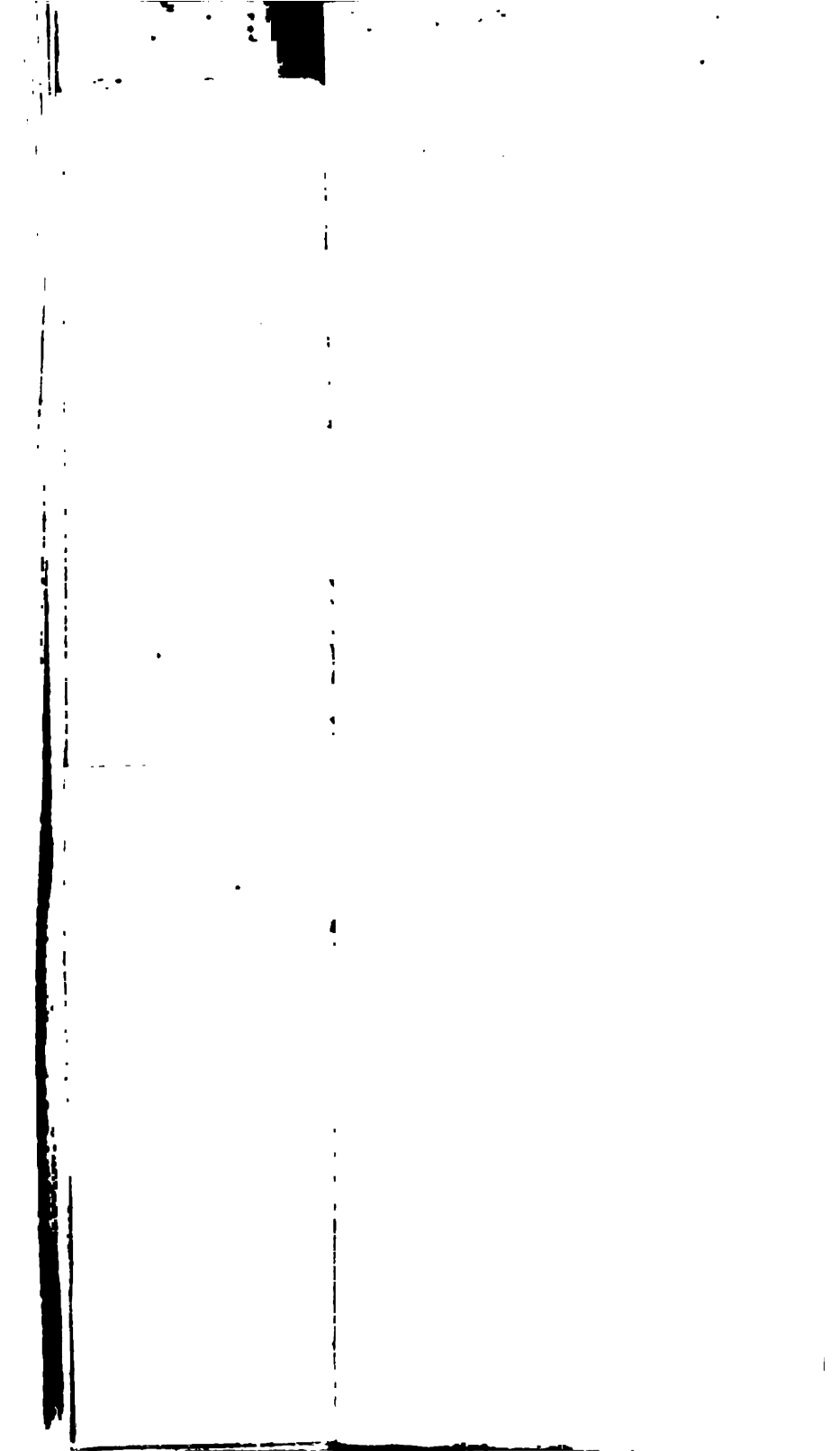
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